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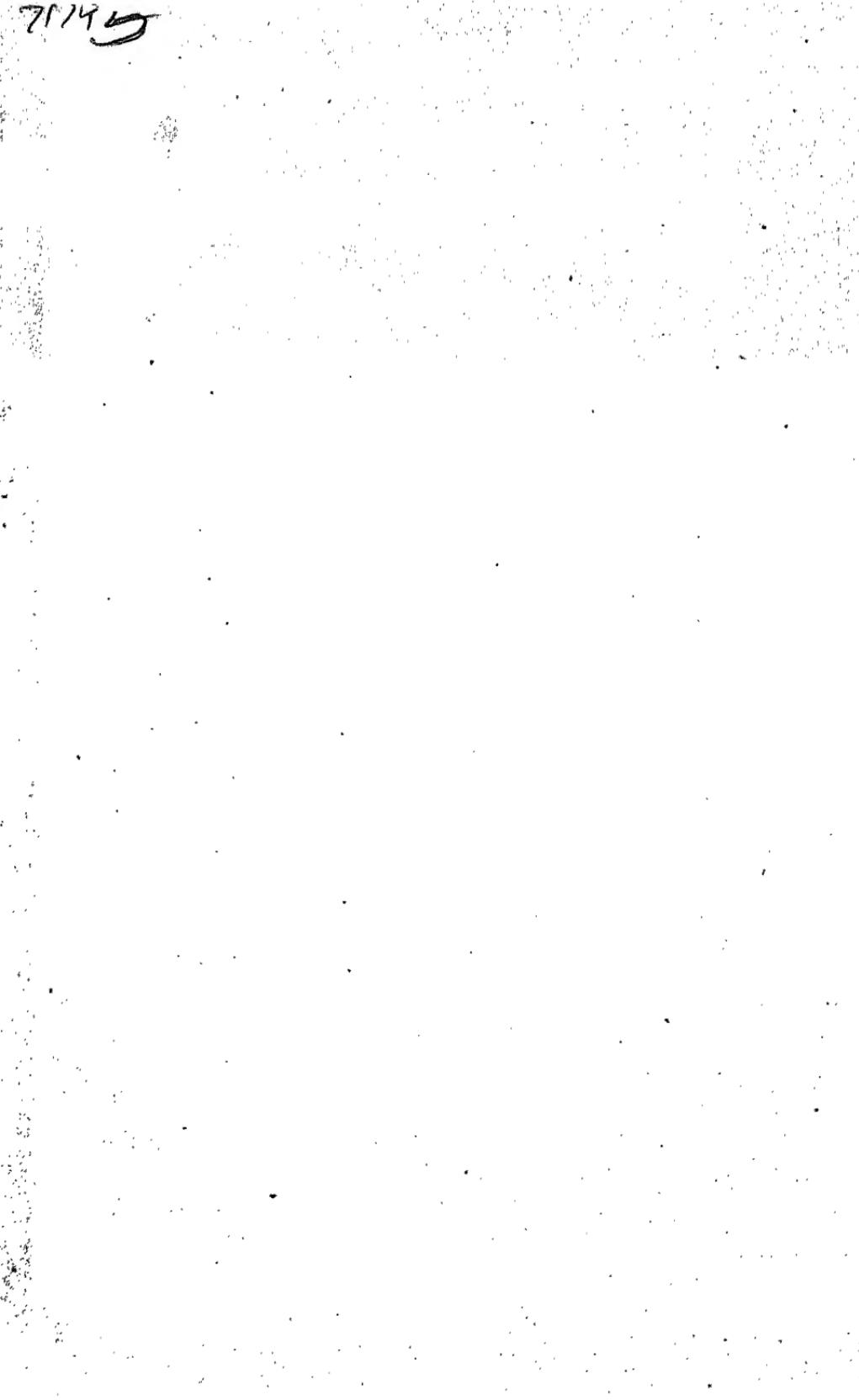
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MOD

Introduction

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श्रीगोकुल मुद्रणालय आयुर्वेद ग्रन्थमाला

१

भूमिका

# रसजलनिधिः

तृतीयखण्डम्

मुखोपाध्यायोपाधिकेन  
सिद्धवैद्य-श्रीभूदेव देवशार्मणा रसाचार्येण  
एम. ए. इत्युपनामधारिणा विरचितः

भूमिका

डॉ० सिद्धिनन्दन मिश्र, पीएच. डी.  
विभागाध्यक्ष  
रसशास्त्र एवं भैषज्यकल्पना  
राजकीय आयुर्वेद महाविद्यालय  
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पुर्वमुद्रित द्वितीय संस्करण १६८४  
द्वितीय भाग मूल्य रु० ७५-००  
१-५ भाग सम्पूर्ण मूल्य ३७५-००

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### नवीन प्रकाशन

१ रसचिकित्सा । प्रभाकर चट्टोपाध्याय	१५-००
२ रसकौमुदी । ज्ञानचन्द्र शर्मा विरचित । पावनी प्रसाद शर्मा कृत 'विद्योतिनी' हिन्दी टीका	६-००

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## PREFACE.

The publication of the present volume has well-nigh brought to close that part of the Rasa-Vidya ( or the science of the minerals in all their aspects, viz., medicinal, alchemical, and industrial ) which should be considered to be an introduction to the study of a pharmacopoeia of drugs prepared mainly from minerals—a pharmacopoeia of a colossal magnitude, prepared, in pre-historic times, by the ancient Indians. Much of the materials, originally intended to be dealt with in the first three volumes, are left out for treatment in a subsequent volume. The fourth and a few of the succeeding volumes would be mainly devoted to the study of recipes most of whom would be found to be astonishingly infallible.

It is not possible for me to make my readers realise the nature of the labour which I, a busy medical practitioner, have been undergoing in carrying on a prolonged research on a highly abstruse and almost forgotten science, without any assistance, financial or otherwise, either from the state or from any body else.

The sympathy with which the lovers of culture all over the world have been viewing the present publication has been the main force which has hitherto enabled me to sustain my energy and to hope for a completion of the work put in hand.

It is gratifying to note that my works are already

being studied by almost all the eminent Ayurvedic physicians all over India, but the majority of the students of Ayurveda in the colleges have not yet had an opportunity to acquaint themselves with the contents of these books (which cover the greater and the better part of Ayurveda) much of which was hitherto unknown to the world. I know that there is a paucity of teachers who can efficiently teach this the most important branch of Ayurvedic studies, but I am confident that a gradual spread of the knowledge contained in the present publication will go a great way in removing this paucity at a near future.

I am thankful to Prof. Berthold Laufer of the Field Museum of National History, Chicago, and some other scholars for their suggestion to adopt the commonly accepted practice of transliteration of Sanskrit names into Roman characters. I have decided to act up to their suggestion from Vol. IV, which has already been sent to the press.

There are scholars who are more interested in the history of a science than in the science itself. For the satisfaction of such scholars, I have dealt briefly with the history of Hindu chemistry in a chapter in my newly published work, entitled "Indian Civilization and its Antiquity" (Price Rs. 2-India).

I cannot conclude the present volume without a reference to the encouragement which I have received from men of eminence connected with the spread of Ayurvedic education in this country, and especially from the Hon'ble Mr. Justice Manmatha Nath Mookerji of the Calcutta High Court (President,

Astanga Ayurved College, Calcutta) and from the late Mr. Justice Gokarna Nath Misra of Lucknow.

I am also thankful to Mr. H. E. Stapleton, M. A. I.E.S., Director of Public Instruction, Bengal, for his kindly taking an interest in my publications.

I am much obliged to Professors Satkari Mookerji, M. A. and Kshitish Chandra Chatterji, M. A., (both belonging to the Department of Post Graduate classes in Sanskrit, Calcutta University) for the help they have ungrudgingly rendered to me in correcting the proof sheets and for several suggestions received from them.

The keenness of interest with which the publication of the present volume has all along been watched by Kaviraj Jatindranath Ghosal Kaviratna, Kaviraj Birindra Mohun Chand Ray B. A., Sj. Debi Charan Ghosal and some other pupils of mine needs a special mention.

41-A, Grey Street,  
Calcutta.

*The 27th December, 1929.*

BHUDEB MOOKERJI.



## CONTENTS

### CHAPTER I.

	PAGE
Lauha ( iron )	3
Properties of lauha	3
Natural blemishes of iron	3
Evil effects of impure iron	4
Varieties of iron	4
(a) Munda or ordinary iron	6
Properties of excellent munda iron	7
(b) Tikshna iron—Its varieties :—	7
Properties of tikshna iron	11
(c) Kanta-lauha ( magnetic oxide of iron )	12
Its characteristics	13
Its varieties	15
Their special features	16
Properties of kanta-lauha	17
Purification of iron	17
Incineration of iron	21
Utility of putam	40
Bhanupaka	42
Sthali-paka	43
Puta-paka	45
Putam with special drugs	52
Sthali-paka for the second time	53
How to heat a thing by putam	57
Removal of defects of Iron incinerated without mercury	64
Sudha-sagara-lauham	70
Test of incinerated iron	71
How to deprive the ashes of iron of the power of being restored to their original condition	72
Nectarization of incinerated iron	73

	PAGE
Doses of iron ... ... ...	80
Anupanas or accompaniments of iron ... ...	81
Dietary in taking iron ... ...	84
Prohibitions ... ...	85
Remedy of evils due to irregularities in taking metals—siddhisara ... ...	87-88
Evil effects of iron, not properly incinerated ...	88
Remedy of the evils ... ...	89
Liquefaction of iron ... ...	90
Mandura ... ...	91
Varieties of mandura ... ...	92
Fitness of mandura ... ...	93
Incineration of mandura ... ...	94
Use of mandura ... ...	95
Liquefaction of mandura ... ...	95

## CHAPTER II.

Jasoda ( zinc ) ... ...	96
Its properties ... ...	96
Purification of jasoda ... ...	97
Incineration of jasoda ... ...	97
Accompaniments of jasoda ... ...	100
Doses of jasoda ... ...	100
Evil effects of jasoda, not properly incinerated ...	101
Remedy of Do. ... ...	101
Vanga ( tin )—Its varieties ... ...	102
Its properties ... ...	103
Purification of tin ... ...	104
Incineration of tin ... ...	106
Vanga-kalpa ... ...	114
Accompaniments of vanga ... ...	117
Evil effects of vanga, not properly purified and incinerated ... ...	119
Remeey of Do. ... ...	120

	PAGE
Sisaka ( lead ) ...	120
Its properties ...	120
Test of lead free from alloy ...	122
Purification of lead ...	123
Incineration of lead ...	126
Nectarization of lead ...	137
Accompaniments of lead ...	139
Evil effects of lead, not properly purified and incinerated ...	140
Remedy of Do ...	140

### CHAPTER III.

Mixed metals—pittala ( brass )—its varieties ...	142
Characteristics of good and bad brass ...	143
Purification of pittala ( brass ) ...	143
Incineration of pittala ...	145
Use of brass ...	146
Transmutation of brass and bell-metal ...	147
Kansya ( bell-metal ) ...	148
Characteristics of good bell-metal ...	148
Characteristics of bad bell-metal ...	148
Properties of bell-metal ...	149
Purification of bell-metal ...	149
Incineration of bell-metal ...	150
Varta-loha ...	150
Its properties ...	151
Purification and incineration of varta-loha ...	152
Triloha ...	152
Purification and incineration of triloha ...	152
Triloha-Rasanayam ...	153
Essence of earth-worms ...	154
Khara-sattwa ...	154
Extraction of the best essence of earth-worms ...	156
Use of the afore-said essence ...	157
Superiority of metallic drugs ...	158

## CHAPTER IV.

Ratnas ( gems ) ...	...	...	...	160
The five gems ...	...	...	...	161
Gems favourite to the planets ...	...	...	...	162
Gems fit for use ...	...	...	...	162
Vajra or hiraka ( Diamond ) ...	...	...	...	163
Colour of diamonds ...	...	...	...	164
Another classification of diamonds ...	...	...	...	164
Merits of different kinds of diamonds ...	...	...	...	166
Characteristics of good diamond ...	...	...	...	167
Characteristics of bad diamonds ...	...	...	...	168
Defects found in gems in general ...	...	...	...	169
Evil effects of diamonds, not properly purified and incinerated ...	...	...	...	169
Purification of diamond ...	...	...	...	170
Incineration of diamond				
( 1 ) White diamonds ...	...	...	...	172
( 2 ) Red diamonds ...	...	...	...	173
( 3 ) Yellow diamonds ...	...	...	...	174
( 4 ) Black diamonds ...	...	...	...	175
Special directions ...	...	...	...	176
( 2 ) Incineration of diamonds irrespective of colour ...	...	...	...	177
General method of incineration of all the gems				
Uses of diamond ...	...	...	...	184
Softening of diamonds ...	...	...	...	185
Liquefaction of diamond ...	...	...	...	187
Liquefaction of all the gems ...	...	...	...	187
Removal of evil effects of diamond, not properly incinerated ...	...	...	...	188
Purification of gems in general ...	...	...	...	190
General process of purification of gems ...	...	...	...	191
Incineration of gems other than diamond ...	...	...	...	193
General properties of all the gems ...	...	...	...	195

## PAGE

<b>Marakata (emerald)</b>	...	...	...	196
<b>Characteristics of bad emerald</b>	...	...	...	197
<b>Properties of emerald</b>	...	...	...	197
<b>Emeralds of superior quality</b>	...	...	...	198
<b>Test of genuine emerald</b>	...	...	...	199
<b>Manikya (ruby)—Its variety</b>	...	...	...	202
<b>Characteristics of good rubies</b>	...	...	...	203
<b>Defects of rubies</b>	...	...	...	203
<b>Test of ruby</b>	...	...	...	205
<b>Characteristics of excellent rubies</b>	...	...	...	205
<b>Weight of rubies</b>	...	...	...	207
<b>Properties of ruby</b>	...	...	...	209
<b>Mukta (Pearl)</b>	...	...	...	210
<b>Properties of mukta</b>	...	...	...	210
<b>Varieties of pearls—</b>	...	...	...	210
(a) Elephant-pearl	...	...	...	211
(b) Snake-pearl	...	...	...	212
(c) Fish-pearl	...	...	...	212
(d) Hog-pearl	...	...	...	213
(e) Bamboo-pearl	...	...	...	213
(f) Conch-pearl	...	...	...	214
(g) Frog-pearl	...	...	...	214
(h) Oyster-pearl	...	...	...	215
<b>Classification of all the pearls according to colour</b>	...	...	...	215
<b>Characteristics of good pearls</b>	...	...	...	216
<b>Characteristics of bad pearls</b>	...	...	...	216
<b>Perforation of pearls</b>	...	...	...	217
<b>Nila (sapphire)</b>	...	...	...	217
<b>Characteristics of a good indra-nila</b>	...	...	...	218
<b>Varieties of jala-nila</b>	...	...	...	219
<b>Copper-coloured sapphire</b>	...	...	...	219
<b>Rain-bow sapphire</b>	...	...	...	219
<b>Maha-nila</b>	...	...	...	220
<b>Gomedam (zercon)</b>	...	...	...	220
<b>Zercon is to be tested</b>	...	...	...	221

	PAGE
<b>Secondary colours of gems ...</b>	<b>222</b>
<b>Zercon of highly excellent quality</b>	<b>222</b>
<b>Properties of zercon</b>	<b>223</b>
<b>Vaiduryam (oriental cat's eye and similar stones)</b>	<b>223</b>
<b>Varieties of vaiduryam</b>	<b>224</b>
<b>Characteristics of good and bad vaiduryam</b>	<b>225</b>
<b>Test of vaiduryam</b>	<b>226</b>
<b>Properties of vaiduryam</b>	<b>226</b>
<b>Vaikranta (garnet)</b>	<b>226</b>
<b>Varieties of vaikranta</b>	<b>227</b>
<b>Properties of vaikranta</b>	<b>228</b>
<b>Mines of vaikaranta</b>	<b>229</b>
<b>Purification of vaikranta</b>	<b>230</b>
<b>Incineration of vaikranta</b>	<b>231</b>
<b>Use of garnet in place of diamond</b>	<b>233</b>
<b>Extraction of essence of vaikranta</b>	<b>233</b>
<b>Uses of vaikranta</b>	<b>234</b>
<b>Varieties of sphatika (quartz)</b>	<b>236</b>
<b>Properties of sphatika</b>	<b>237</b>
<b>Properties of water kept in a pot made of sphatika...</b>	<b>237</b>
<b>The Sun-stone and the Moon-stone</b>	<b>238</b>
<b>Properties of Sun-stone</b>	<b>239</b>
<b>Properties of Moon-stone</b>	<b>239</b>
<b>Properties of Moon-stone water</b>	<b>239</b>
<b>Pravalam (coral)—Its varieties</b>	<b>240</b>
<b>Characteristics of good corals</b>	<b>241</b>
<b>Characteristics of bad corals</b>	<b>242</b>
<b>Softness of corals</b>	<b>242</b>
<b>Properties of corals</b>	<b>242</b>
<b>Karketam (chrysoberyl or chrysolite)</b>	<b>242</b>
<b>Varieties of karketam</b>	<b>243</b>
<b>Characteristics of good karketam</b>	<b>244</b>
<b>Properties of karketam</b>	<b>244</b>
<b>Pushparaga (topaz)</b>	<b>245</b>
<b>Distinction of pusparaga from the other gems</b>	<b>246</b>

	PAGE
Sub-colours of topazes ...	246
Characteristics of good topaz ...	247
Characteristics of a bad topaz ...	247
Properties of pushpa-raga ...	248
Rajavarta (quartz amethyst—lapis lazuli)	248
Properties of rajavarta ...	249
Purification of rajavarta ...	250
Incineration of rajavarta ...	250
Extraction of essence of rajavarta ...	251
Bhisma-mani (a kind of anti-poisonous quartz)	252
Bhisma-mani, unfit for use ...	252
Properties of sapphire ...	253
Uparatnas (amorphous stones)	253
Palanka (onyx) ...	254
Rudhiram (carnelian)	255
Puttika (peridot)	256
Turkhaja (turquoise—biraja)	256
Pilu (jade) ...	257
Upalam (chalcedony, opal, and agate) ...	258
Sugandhikam (spinel) ...	259
General properties of amorphous stones	259

## CHAPTER V.

Ksharas (alkalis) ...	261
General properties of the ksharas ...	264
General process of manufacturing ksharas ...	266
Javakshara—Its preparation ...	267
Properties of pakima (nava-sara) ...	268
Ksharas obtained from the earth ...	268
(I) Ushara or sora (salt-petre) ...	268
Its names ...	269
Its properties ...	270
Mixed kshara ...	270
(2) Swarji kshara (refined natron) ...	271

	PAGE
<b>Its properties</b> ...	272
<b>Artificial swarji kshara</b> ...	272
(3) <b>Tankana (borax)</b> ...	273
<b>Varieties of tankana</b> ...	274
<b>Properties of tankana</b> ...	275
<b>Purification of tankana</b> ...	275
<b>Two kinds of ksharas—liquid and solid</b> ...	276
<b>Diseases in which solid kshara is to be applied</b> ...	276
<b>Use of liquid kshara</b> ...	277
<b>Process of preparing swarva-kshara</b> ...	279
<b>The two ksharas</b> ...	281
<b>The eight ksharas</b> ...	282

### CHAPTER VI.

<b>Lavanas (salts)</b> ...	283
<b>Properties of salts in general</b> ...	284
<b>Properties of salts taken in excess</b> ...	284
(1) <b>Samudra lavana (sea-salt)</b> ...	284
(2) <b>Saindhava (rock-salt)</b> ...	285
(3) <b>Bira (an artificial salt)</b> ...	286
<b>Preparation of bira salt (black salt)</b> ...	287
(4) <b>Sauvarchala (salt-petre)</b> ...	288
<b>Preparation of artificial sauvarchala</b> ...	288
(5) <b>Romaka (sambara-salt)</b> ...	290
<b>Its properties</b> ...	290
(6) <b>Chulika salt</b> ...	291

### CHAPTER VII.

<b>Poisons</b> ...	292
<b>Inorganic poison</b> ...	293
<b>Description of tuber poisons</b> ...	294
(1) <b>Saktuka</b> ...	294
(2) <b>Mustaka</b> ...	294
(3) <b>Shringi</b> ...	295
(4) <b>Baluka (Saikata)</b> ...	295

	PAGE
(5) Sarshapa ... ...	295
(6) Batsa-nabha (aconite) ... ...	296
<b>Properties of aconite</b> ... ...	<b>297</b>
(7) Kurma ... ...	297
(8) Sweta-shringa ... ...	298
(9) Kalakuta ... ...	298
(10) Mesha-shringi ... ...	299
(11) Halahala ... ...	299
(12) Dardura ... ...	300
(13) Karkata ... ...	301
(14) Mulaka ... ...	301
(15) Granthi ... ...	301
(16) Haridra or vairata ... ...	302
(17) Racta-shringi ... ...	302
(18) Keshara, Pradipana or Mahabisha ...	303
<b>Use of tuber-poisons</b> ... ...	<b>304</b>
<b>Caste or classification of the eight poisons referred to above</b> ... ...	<b>305</b>
<b>Properties of poisons, according to caste</b> ...	<b>306</b>
<b>Evil properties of the poisons in general</b> ...	<b>308</b>
<b>Special trouble due to inorganic poisons</b> ...	<b>309</b>
<b>Troubles due to a sudden entrance of poison into the system</b> ... ...	<b>309</b>
<b>Treatment of poison</b> ... ...	<b>310</b>
<b>Merits of good poisons</b> ... ...	<b>314</b>
<b>How tuber-poison is to be procured</b> ...	<b>314</b>
<b>Purification of tuber-poisons</b> ...	<b>315</b>
<b>Killing of tuber poison</b> ... ...	<b>316</b>
<b>Persons fit to take poison</b> ... ...	<b>317</b>
<b>Directions for taking poison</b> ... ...	<b>318</b>
<b>Doses in which poison is to be taken</b> ...	<b>320</b>
<b>Diet considered salutary in taking poison</b> ...	<b>321</b>
<b>Restriction in diet</b> ... ...	<b>322</b>
<b>Uses of inorganic poison</b> ... ...	<b>323</b>
<b>Organic poison</b> ... ...	<b>326</b>

	PAGE
Purification of serpent-poison	... 327
Symptoms due to organic poison	... 328
Remedy of snake-bite	... 329
<b>CHAPTER VIII.</b>	
Upabisha (semi-poison)	... 330
Purification of semi-poisons in general	... 331
Snuhi—its purification	... 332
Arka	... 333
Langali	... 334
Its purification	... 335
Gunja—its purification	... 336
Use of white gunja	... 336
Karavira—its purification	... 337
Visha-musti	... 338
Purification of visha-musti	... 339
Dhustura—its purification	... 340
Jayapala—its purification	... 341
Bhallataka	... 344
Extraction of essence of bhallataka	... 345
Nirvisha—ativisha	... 347
Opium	... 348
Purification of opium	... 349
Jaya	... 349
Purification of jaya	... 350
Ganja	... 351
Remedy of semi-poisons	... 351
Remedy of opium	... 351
Remedy of dhattura	... 351
Remedy of bhallataka poison	... 353
Remedy of bhanga poison	... 354
Remedy of gunja poison	... 355
Remedy of karabira poison	... 356
Remedy of snuhi poison	... 356
Remedy of arka poison	... 357

	PAGE
Remedy of jayapala poison ...	357
Purification of some materials requiring purification—	357
Purification of guggulu ...	359
Purification of leeches ...	360
<b>CHAPTER IX.</b>	
Extraction of oil from seeds of any kind	361
Extraction of oil from seeds, in particular	364
<b>CHAPTER X.</b>	
Alcoholic liquors (wine) ...	371
Gouri—madhvi—paisti ...	372
Kadamvari—varuni--madhuki ...	373
Maireyi—mardwika ...	374
Different parts of undistilled wine	375
Properties of wine in general	376
Non-alcoholic but fermented liquids	376
Asava and Arista ...	377
Proportion of materials in an Arista	378
Sidhu (a kind of vinegar) ...	379
Suktam ...	379
Dhanyamla ...	380
Kanji ...	381
Gura-shuktam—chukram—tushambu—sauvira	382
Aranala—shindaki ...	383
<b>CHAPTER XI.</b>	
Paribhasa (Definitions) ...	384
Sulva-naga ...	384
Vara-loha ...	385
Copper extracted from bell-metal	385
Bara-naga (excellent lead) ...	386
Patangi-raga and chullaka raga	386
Abapa—abhisheka—nirbapa	387
Suddhavarta and Vijavarta ...	387
Swanga-shitala and Bahis-shitala	388
Names of well-known chemists	390

## ERRATA.

Page 11, line 2, for "ala" read "Kala".

" 74, line 7, for "iron" read gurb (molasses).

" 104, insert "Purification of vanga" after the first line.

" 220, after Maha-nila insert, "for Properties of sapphire,  
see page 253".

Page 330, line 9, for VII, read VIII.

## रसजलनिधि ।

( तृतीयखण्डम् )

मुखोपाध्यायोपाधिकेन  
सिद्धवैद्यश्रीभूदेवदेवशर्मणा रसाचार्येण  
एम. ए. इत्युपनामधारिणा  
विरचितः ।



## सूचीपत्रम् ।

विषयः		पृष्ठम् ।
भज्जलाचरणम्	...	१
	...	२
	...	३
	...	४
	...	५
	...	६
	...	७
	...	८
	...	९
	...	१०
	...	११
	...	१२
	...	१३
	...	१४
	...	१५
	...	१६
	...	१७
	...	१८

## प्रथमोऽध्यायः ।

लौहम् । अस्य नामानि	...	२
अस्य गुणाः	...	२
लौहस्य साभाविकदोषाः	...	३
दुष्टलौहसेवनस्य फलम्	...	४
लौहस्य प्रकाराः	...	५
(क) मुण्डम् ( पूतिलौहम् )	...	६
श्रेष्ठमुण्डस्य गुणाः	...	०
(ख) तीक्ष्णम्	...	०
(१) खरम्	...	८
(२) सारलौहम्	...	८
(३) हन्त्राललौहम्	...	८
(४) तारापद्मलौहम्	...	८
(५) वज्रलौहम्	...	१०
(६) काललौहम्	...	१०
तीक्ष्णलौहस्य गुणाः	...	११
(७) कान्तलौहम् । तस्य लक्षणम्	...	१२
कान्तलौहस्य भेदाः	...	१४
भ्रामकादीनां विशेषगुणाः	...	१६
कान्तलौहस्य गुणाः	...	१७
लौहस्य शोधनम्	...	१८

विषयः				पृष्ठम् ।
लौहस्य मारणम्	...	...	...	२०
रसव्यतिरेकेन मारितलौहस्य पुटविधिः			...	४०
माणुपाकविधिः	...	...	...	४१
स्थालीपाकविधिः	...	...	...	४२
पुटपाकविधिः	...	...	...	४४
त्रिफलादिगणः	...	...	...	४६
एरण्डादिगणः	...	...	...	४६
किरातादिगणः	...	...	...	४६
शृङ्खलादिगणः	...	...	...	४७
गोभूरादिगणः	...	...	...	४७
पटोलादिगणः	...	...	...	४७
किंशुकादिगणः	...	...	...	४७
शतवर्यादिगणः	...	...	...	४७
विदाव्यादिगणः	...	...	...	४८
पुठपाके उपदेशः	...	...	...	४८
प्रयोजनवशात् पुठपाके प्रयोज्या चनस्पतयः			...	५१
पुनः स्थालीपाकविधिः	...	...	...	५३
पुठपाकप्रकारः	...	...	...	५६
पारदविहोनलौहमस्मनो दोषापनयनम्			...	६४
शुक्ललौहम्	...	...	...	६५
सुधासागरलौहम्	...	...	...	७०
लौहमस्मनः परीक्षा	...	...	...	७१
उत्थितलौहस्य निरूप्योकरणम्	...	...	...	७२
मृतलौहस्यामृतीकरणम्	...	...	...	७३
रसायणप्रयोगे लौहस्य संस्कारविशेषः			...	७४
लौहादीनां सेवनमात्रा	...	...	...	७६

विषयः				पृष्ठम् ।
लौहस्य द्रावणम्	...	...	...	६०
मण्डूरम् ( लौहकिण्डम् )	...	...	...	६१
मण्डूरस्य भेदाः	...	...	...	६२
मण्डूरस्य व्यवहार योग्यता	...	...	...	६३
मण्डूरस्य शोधनमारणम्	...	...	...	६४
मण्डूरस्यव्यवहारः	...	...	...	६५
मण्डूरस्य द्रावणम्	...	...	...	६५
लौहभक्षण मन्त्रः	...	...	...	८०
लौहभस्मानुपानम्	...	...	...	८०
लौहसेवने पथ्यम्	...	...	...	८३
लौहसेवने अपथ्यम्	...	...	...	८५
लौहव्यापत्राशनं चूर्णम्	...	...	...	८७
सिद्धिसारः	...	...	...	८७
अपकलौहस्य अवगुणः	...	...	...	८८
शुद्धलौहसेवनजनितविकारानां शान्तिः	...	...	...	८८

### द्वितीयोऽध्यायः ।

यशोदम्	...	...	...	६६
अस्य गुणाः	...	...	...	६६
यशोदस्य शोधनम्	...	...	...	६७
यशोदस्य मारणम्	...	...	...	६७
यशोदमारणस्य विध्यन्तराणि	...	...	...	६८
दशोदस्यानुपानानि	...	...	...	६८
यशोदभस्मनो मात्रा	...	...	...	१००
सदोषयशोदस्य अवगुणः	...	...	...	१०१
यशोदविकारशान्तिः	...	...	...	१०२

विषयः				पृष्ठम् ।
वद्धम्	...	...	...	१०१
अस्य भेदः	...	...	...	१०२
अस्य गुणाः	...	...	...	१०२
अस्य शोधनम्	...	...	...	१०३
अस्य मारणम्	...	...	...	१०६
वंगकल्पः	...	...	...	११४
वंगस्य अनुपानानि	...	...	...	११६
शोधनमारणहीनवद्धस्य अवगुणाः	...	...	...	११६
वंगविकारशान्तिः	...	...	...	१२०
अथ नागम् । सीसकस्य गुणाः	...	...	...	१२०
शुद्धसीसस्य परीक्षा	...	...	...	१२२
अस्य शोधनम्	...	...	...	१२२
अस्य मारणम्	...	...	...	१२५
नागमृतम्	...	...	...	१३७
नागस्य अनुपानम्	...	...	...	१३६
शोधनमारणहीननागस्य अवगुणाः	...	...	...	१३६
नागदोषशान्तिः	...	...	...	१४०

### तृतीयोऽध्यायः ।

मिथधातवः । पित्तलम् । अस्य नामानि	...	...	१४१
अस्य भेदाः	...	...	१४१
शुभाशुभपित्तलस्य लक्षणम्	...	...	१४२
पित्तलस्य शोधनम्	...	...	१४३
पित्तलस्य मारणम्	...	...	१४५
पित्तलस्य व्यवहारः	...	...	१४६
कांस्यपित्तलयोर्वेदः	...	...	१४७

विषयः				पृष्ठम् ।
कांस्यम्	...	...	...	१४७
शुमकांस्यस्य लक्षणम्	...	...	...	१४७
अशुभकांस्यस्य लक्षणम्	...	...	...	१४८
कांस्यस्य गुणाः	...	...	...	१४८
अस्य शोधनम्	...	...	...	१५६
अस्य भारणम्	...	...	...	१५०
वर्तलोहम्	...	...	...	१५०
अस्य गुणाः	...	...	...	१५१
अस्य शोधनमारणम्	...	...	...	१५१
त्रिलोहम्	...	...	...	१५२
अस्य शोधनमारणम्	...	...	...	१५२
त्रिलोहरसायणम्	...	...	...	१५३
भूनागसत्त्वम्	...	...	...	१५३
खरसत्त्वम्	...	...	...	१५४
भूनागस्य श्रेष्ठसत्त्वपातनविधिः	...	...	...	१५५
अनन्तरोक्तभूनागसत्त्वस्य गुणाः	...	...	...	१५६
भेषजेषु रसग्राधान्यम्	...	...	...	१५७

### चतुर्थोऽध्यायः ।

रत्नानि—तेषां प्रकाराः	...	...	...	१५६
पञ्चरत्नम्	...	...	...	१६१
ग्रहरत्नानि ( नवरत्नम् )	...	...	...	१६२
व्यवहारयोग्यरत्नानि	...	...	...	१६२
वज्रम्	...	...	...	१६३
वज्राणां वर्णाः	...	...	...	१६३
वज्राणां भेदान्तरम्	...	...	...	१६४

विषया				पृष्ठम् ।
वज्रभेदानां गुणाः	...	...	...	१६५
उत्तमवज्रस्य लक्षणानि	...	...	...	१६६
अशुभवज्रस्य लक्षणानि	...	...	...	१६८
सर्वरक्षानां साधारणदोपाः	...	...	...	१६८
शोधनमारनहीनवज्रस्यावगुणाः	...	...	...	१६९
वज्रस्य शोधनम्	...	...	...	१६९
वज्राणां मारणम् । (१) विश्रवज्रस्य मारणम्	...	...	...	१७२
(२) क्षत्रियवज्रस्य मारणम्	...	...	...	१७३
(३) वैश्यवज्रस्य भारणम्	...	...	...	१७४
(४) शूद्रवज्रस्य मारणम्	...	...	...	१७५
खीनपुंसकभेदेन वज्राणां मारणे वैशिष्ट्यम्	...	...	...	१७६
सामान्येन वज्रमारणम्	...	...	...	१७६
सर्वरक्षानां मारणम्	...	...	...	१८५
वज्रस्य व्यवहारः	...	...	...	१८५
वज्रस्य मृदूकरणम्	...	...	...	१८६
वज्रस्य द्रुतिः	...	...	...	१८७
सर्वरक्षानां द्रुतिः	...	...	...	१८८
वज्रविकारशान्तिः	...	...	...	१९०
सर्वरक्षानां शोधनक्रमः	...	...	...	१९०
तेषां शोधनस्य सामान्यविधिः	...	...	...	१९१
वज्रेतररक्षानां भस्मक्रमः	...	...	...	१९३
सदोपमनयः परिहर्तव्याः	...	...	...	१९३
सर्वरक्षानां सामान्यगुणाः	...	...	...	१९५
मरकतम्	...	...	...	१९६
प्रचस्तमरकतस्य लक्षणम्	...	...	...	१९६
अहस्तमरकतस्य लक्षणम्	...	...	...	१९६

विषयः				पृष्ठम् ।
मरकतस्य गुणाः	...	...	...	१६७
महागुणं मरकतम्	...	...	...	१६८
जात्यमरकतस्य परीक्षा	...	...	...	१६९
माणिक्यम्—तस्य भेदाः	...	...	...	२०१
शस्त्रमा णक्यस्य लक्षणम्	...	...	...	२०३
दुष्टमाणिक्यस्य लक्षणम्	...	...	...	२०४
माणिक्यस्य परीक्षा	...	...	...	२०५
श्रेष्ठपद्मरागस्य लक्षणम्	...	...	...	२०५
माणिक्यस्य परिमानम्	...	...	...	२०७
माणिक्यस्य गुणाः	...	...	...	२०६
मुक्ता	...	...	...	२०६
अस्या गुणाः	...	...	...	२०६
अस्या भेदाः	...	...	...	२१०
(क) गजमुक्ता	...	...	...	२१०
(ख) स्पर्शमणि	...	...	...	२११
(ग) मीनमुक्ता	...	...	...	२१२
(घ) वराह मुक्ता	...	...	...	२१३
(ङ) वेणुमुक्ता	...	...	...	२१३
(च) शङ्खमुक्ता	...	...	...	२१४
(छ) ददुरमुक्ता	...	...	...	२१४
(ज) शुक्तिमुक्ता	...	...	...	२१४
सर्वमौक्तिकानां वर्णभेदः	...	...	...	२१५
शुभमौक्तिकस्य लक्षणम्	...	...	...	२१६
अपकृष्टमौक्तिकस्य लक्षणम्	...	...	...	२१६
मौक्तिकानां वेदः	...	...	...	२१७
नीलम्	...	...	...	२१७

विषयः				पृष्ठम् ।
श्रेष्ठेन्द्रनीलस्य लक्षणम्	...	...	...	२१८
जलनीलस्य भेदाः	...	...	...	२१८
ताङ्गाभनीलमणिः	...	...	...	२१९
इन्द्रधनुर्नीलम्	...	...	...	२१९
महानीलम्	...	...	...	२२०
गोमेदमणिः	...	...	...	२२०
गोमेदं परीक्षणीयम्	...	...	...	२२०
शस्तगोमेदम्	...	...	...	२२१
अश्वस्तगोमेदम्	...	...	...	२२१
गोमेदस्य छायाः	...	...	...	२२२
प्रश्वस्तगोमेदम्	...	...	...	२२३
गोमेदस्य गुणाः	...	...	...	२२३
वैदूर्यम्	...	...	...	२२३
वैदूर्यस्य भेदः	...	...	...	२२५
शस्तवैदूर्यस्य लक्षणम्	...	...	...	२२५
अश्वस्तवैदूर्यस्य लक्षणम्	...	...	...	२२५
वैदूर्यस्य परीक्षा	...	...	...	२२५
वैदूर्यस्य गुणाः	...	...	...	२२६
वैक्रान्तम्	...	...	...	२२६
वैक्रान्तस्य भेदाः	...	...	...	२२७
वैक्रान्तस्य गुणाः	...	...	...	२२८
वैक्रान्तस्योत्पत्तिस्लम्	...	...	...	२२९
वैक्रान्तस्य शोधनम्	...	...	...	२२९
वैक्रान्तस्य मारणम्	...	...	...	२३१
वज्रासाने वैक्रान्तस्य व्यवहारः	...	...	...	२३३
वैक्रान्तस्य सत्त्वपातनम्	...	...	...	२३३

विषयः				पृष्ठम् ।
वैकान्तस्य प्रयोगः	...	...	...	२३४
स्फटिकम्	...	...	...	२३५
स्फटिकस्य भेदाः	...	...	...	२३६
स्फटिकस्य गुणाः	...	...	...	२३७
स्फटिकनिर्मितजलपात्रस्य गुणाः	...	...	...	२३७
चन्द्रसूर्यकान्ती	...	...	...	२३८
चन्द्रकान्तस्य गुणाः	...	...	...	२३९
चन्द्रकान्तोद्धबोदकस्य गुणाः	...	...	...	२४०
प्रवालम्	...	...	...	२४०
अस्य भेदाः	...	...	...	२४०
शस्तप्रवालानां लक्षणानि	...	...	...	२४१
अशस्तप्रवालानां लक्षणानि	...	...	...	२४१
चिद्रुमस्य कोमलत्वम्	...	...	...	२४१
प्रवालस्य गुणाः	...	...	...	२४१
प्रवालस्य गुणाः	...	...	...	२४२
कर्कतम्	...	...	...	२४२
कर्कतस्य भेदाः	...	...	...	२४३
कर्कतस्य लक्षणम्	...	...	...	२४३
अस्य गुणाः	...	...	...	२४४
पुष्परागः	...	...	...	२४५
रत्नान्तरेभ्यः पुष्परागस्य विभेदः	...	...	...	२४५
पुष्परागाणां छायाः	...	...	...	२४६
शस्तपुष्परागस्य लक्षणम्	...	...	...	२४६
अशस्तपुष्परागस्य लक्षणम्	...	...	...	२४७
पुष्परागस्य गुणाः	...	...	...	२४७
राजावत्तः	...	...	...	२४८

विषयः				पृष्ठम् ।
अस्य गुणः—शोधनम्	...	...	...	२४६
अस्य सत्त्वपातनम्	...	...	...	१५१
भीष्मरत्नम्	...	...	...	२५१
अशस्तभीष्मरत्नम्	...	...	...	२५२
नोलमणेगुणाः	...	...	...	२५३
उपरत्नानि	...	...	...	२५३
पालङ्कम्	...	...	...	२७४
घधिरम्—पूत्तिका	...	...	...	२५५
तार्क्षजम्	...	...	...	२५६
पीलु	...	...	...	२५६
उपलम्	...	...	...	२५७
सुगन्धिकम्	...	...	...	२५८
उपरत्नाणां सामान्यगुणाः	...	...	...	२५९

### पञ्चमोऽध्यायः ।

क्षाराः	...	...	...	२६०
सामान्येन क्षाराणां गुणाः	...	...	...	२६३
भस्मज्ञक्षारनिर्माणस्य सामान्यविधिः	...	...	...	२६५
यवक्षारः	...	...	...	२६६
अस्य तिर्माणविधिः	...	...	...	२६७
अस्य गुणाः	...	...	...	२६७
पाकिमक्षारस्य गुणाः	...	...	...	२६८
भौमक्षाराः—ऊषरक्षारः—अस्य निर्माणविधिः	...	...	...	२६९
अस्य नामानि	...	...	...	२६९
अस्य गुणाः	...	...	...	२६९
मिथ्रक्षारः	...	...	...	२७०

विषयः			पृष्ठम् ।
सर्वज्ञक्षारः—अस्य निर्माणविधिः	...	...	२७१
अस्य गुणाः—कृत्रिमसर्वज्ञक्षारः	...	...	२७२
टंकनम्—अस्य नामानि	...	...	२७३
अस्य भेदः—अस्य तुणाः	...	...	२७४
अस्य शोधनम्	...	...	२७५
क्षाराणां द्वैविध्यम्	...	...	२७५
प्रतिसार्यक्षारस्य विषयाः	...	...	२७६
तरलक्षारस्य विषयाः	...	...	२७७
सर्वक्षारस्य निर्माणविधिः	...	...	२७८
क्षारद्वयम्—क्षाराष्टकम्	...	...	२८१
<b>पष्ठोऽध्यायः ।</b>			
लवणानि—सामान्येन लवणानां गुणाः	...	...	२८३
अतियुक्तस्य लवणस्य गुणाः	...	...	२८४
सामुद्र लवणम्	...	...	२८४
सैन्धवम्	...	...	२८५
विडम्	...	...	२८५
अस्य गुणाः	...	...	२८६
बिद्विलवणस्य निर्माणम्	...	...	२८६
पौवर्चलम्	...	...	२८७
कृषिम सौचर्चलस्य निर्माणविधिः	...	...	२८८
गोमकस्य—अस्य नामानि—अस्योत्पत्तिस्थलम्	...	...	२८९
भस्प गुणाः	...	...	२९०
चुलिकालवणस्य	...	...	२९१
<b>सप्तमोऽध्यायः ।</b>			
विपाणि	...	...	२९२
स्वावरविषयम्	...	...	२९२

विषयः		पृष्ठम् ।
कन्दविषाणां परिचयः—(१) सत्तुकः—(२) मुस्तकम् ...		२६४
(३) शृङ्खी—(४) वालुकम्—(५) सर्षेपम् ...		२६५
(६) वत्सनाभः ... ... ...		२६६
चतूर्सनामस्य गुणाः ...		२६७
(७) कूर्मः ... ... ...		२६७
(८) श्वेतशृङ्खी (९) कालकृष्णम् ...		२६८
(१०) मेषशृङ्खी—(११) हलाहलः ...		२६९
(१२) दाढ़ूरम् ... ... ...		३००
(१३) कर्कटम् ... ... ...		३००
(१४) मूलकम् ... ... ...		३०१
(१५) घन्यिः ... ... ...		३०१
(१६) हारिद्रः ... ... ...		३०२
(१७) रक्तशृङ्खी ... ... ...		३०२
(१८) प्रदीपनः ... ... ...		३०३
विषाणां व्यवहारः ...		३०३
विषाणकस्य जातिभेदः ...		३०४
व्याहाणादिविषाणां गुणाः ...		३०६
सामान्येन विषाणामवगुणाः ...		३०७
विशेषेण स्थावरविषजनितविकाराः ...		३०८
सहसा विषशीलते विकाराः ...		३०९
विषज्जविकारस्य चिकित्सा ...		३१०
प्रशस्तविषस्य गुणाः ...		३१३
कन्दविषस्य संग्रहविधिः ...		३१४
कन्दविषस्य शोधनम् ...		३१५
कन्दविषस्य मारणम् ...		३१६
विषसेवने पात्रापात्रम् ...		३१६

विषयः				पृष्ठम् ।
विषसेवनस्य विधिः	...	...	...	३१७
विषभक्षणे मात्रा	...	...	...	३१६
विषसेवने पथ्यापथ्यम्	...	...	...	३२१
विषस्य प्रयोगः	...	...	...	३२२
जंगमविषम्	...	...	...	३२३
सर्पविषस्य शोधनम्	...	...	...	३२७
विशेषेण जंगमविषजनितविकाराः	...	...	...	३२८
सर्पदंशनप्रतीकारः	...	...	...	३२८

### अष्टमोऽध्यायः ।

उपविषाणि	...	...	...	३३०
सामान्येनोपविषाणां शोधनम्	...	...	...	३३१
(१) स्तुही	...	...	...	३३१
स्तुहीक्षीरस्य शोधनम्	...	...	...	३३२
(२) अर्कः	...	...	...	३३३
(३) लांगली—अस्था शोधनम्	...	...	...	३३४
(४) गुजारा	...	...	...	३३५
अस्था शोधनम्	...	...	...	३३६
श्वेतगुजारायाः व्यवहारः	...	...	...	३३६
(५) करवीरः	...	...	...	३३७
करवीरस्य शोधनम्	...	...	...	३३८
(६) विषमुष्टिः	...	...	...	३३८
विषमुष्टेः शोधनम्	...	...	...	३३९
धुस्तुरः	...	...	...	३४१
धुस्तुरस्य घोधनम्	...	...	...	३४१
जयपाळः	...	...	...	३४१

विषयः				पृष्ठम् ।
जपपालस्य शोधनम्	...	...	...	३४१
(७) भल्लातकम्	...	...	...	३४२
भल्यातकमउज्जनिष्कर्षणम्	...	...	...	३४५
निर्विषा:	...	...	...	३४६
अतिविषा	...	...	...	३४७
अहिफेनम्	...	...	...	३४७
अहिफेनस्य भेदाः	...	...	...	३४८
अहिफेनस्य शोधनम्	...	...	...	३४९
(१३) जया	...	...	...	३४९
जयायाः शोधनम्	...	...	...	३५०
गुज्ञा	...	...	...	३५०
उपविषविकाराणां शान्तिः	...	...	...	३५१
अहिफेनविषस्य शान्तिः	...	...	...	३५१
धुस्तुरविषस्य शान्तिः	...	...	...	३५२
तल्लातकविकारस्य शान्तिः	...	...	...	३५३
जयाविषस्य शान्तिः	...	...	...	३५४
गुज्ञाविषस्य शान्तिः	...	...	...	३५५
करवीरविषशान्तिः	...	...	...	३५५
स्त्रीविषविकारस्य शान्तिः	...	...	...	३५६
मर्कविषविकारस्य शान्तिः	...	...	...	३५६
जपपालविकारस्य शान्तिः	...	...	...	३५७
शोधनीयानां कतिपयद्रव्यानां शोधनविधयः	...	...	...	३५७
गुणगुलुशोधनम्	...	...	...	३५८
जलौकाशोधनम्	...	...	...	३६०
नवमोऽध्यायः ।				
तेलपातनम्	...	...	...	३६१

विषयः

सामून्येन सर्ववीजानां तैलपातनम्	...	...	पृष्ठम् ।
विशेषेण वीजानां तैलपातनम्	...	...	३६१

दशमोऽध्यायः ।

सन्धानवर्गः	...	...	...	३७०
मदिरं सन्धानम्	...	...	...	३७०
गौडी	...	...	...	३७२
माध्यी, पैष्टी	...	...	...	३७२
कादम्बरी—चारणी—माधूकी	...	...	...	३७३
मेरेयी—मार्दीकम्	...	...	...	३७४
सुरामण्डादि	...	...	...	३७५
सामान्येन मद्यानां स्वभावाः	...	...	...	३७५
अमदिरं सन्धानम्	...	...	...	३७६
आसवस्तथा अरिष्टः	...	...	...	३७७
अरिष्टेषु द्रव्यानां परिमाणम्	...	...	...	३७८
सीधुः	...	...	...	३७८
शुक्रम्	...	...	...	३७९
धान्याम्लम् ( तुषाम्लम् )	...	...	...	३७९
काञ्जिकम्	...	...	...	३८०
गुडशुक्रम्	...	...	...	३८१
चुक्रम्—तुषाम्ल—सौवीरम्	...	...	...	३८२
आरनालम्—शिण्डाकी	...	...	...	३८३

एकादशोऽध्यायः ।

परिभाषा	...	...	...	३८४
शुल्वनागः	...	...	...	३८४
वरलोहम्	...	...	...	३८५

विषयः			पृष्ठम् ।
घोषाकृष्टताप्रम्	...	...	३८५
वरनागम्—पतञ्जीरागश्चुल्लकरागस्य	...	...	३८६
आचारः—अभिषेकः—निर्वापः	...	...	३८७
शुद्धावर्तवीजावत्तौ	...	...	३८८
सांगशीतलं—वहिःशीतलम्	...	...	३८९
रससिद्धाः	...	...	३९०

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## शुद्धिपत्रम् ।

असुद्धपाठः	शुद्धपाठः	पृष्ठम्	पंक्तिः
शाला	शाला	६५	१०
रसेनव	रसेन वै	१८५	१६
धक्कान्तस्य	धैक्कान्तस्य	२३४	१३

२२० पृष्ठे ६ पंक्तेः परं २५३ पृष्ठे लिखितं नीलमणेगुणाः इति संनिवेश्यम् ।

## रसजलनिधिः ।

तृतीयखण्डम् ।

मङ्गलाचरणम् ।

( १ )

रुद्रांकस्थे तव चरणे मे  
काम्ये नित्यं मयि चिरतुष्टे ।  
लीलाशीले तव शुभतेजो ॥  
भातु प्रीते निखिलवरेण्ये ॥

( २ )

बाधाधारा सति तुदते मां  
बभातीशे मम चिरकांक्षाम् ।  
पृथ्वीकारास्थितसुतशीर्षे ।  
आंशीर्धारा तव विनिषिद्धि ॥

( ३ )

विश्वे विश्वे कृषिकुलवाणी  
प्रोद्गीतास्तु श्रवणपिपासा ।  
धीराणां शाम्यतु तव कार्यं  
कर्तुं मह्यं प्रवितर शक्तिम् ॥

( ४ )

जीवानां त्वं भवलयदात्री  
 देवानां त्वं चिरशरणं हि ।  
 मायातीते मम हृदि तिष्ठ  
 कास्यं नात्मिभुवनधात्रि ॥

प्रथमोऽध्यायः ।

अथ लौहम् ।

अस्य नामानि ।

लौहोऽश्री शशकं तीक्ष्णं पिण्डमयः कालायसम् ।  
 कुषिलोहं शिलात्मजमायसञ्चापि कथ्यते ॥

अस्य गुणाः ।

( १ )

मधुरं तुवरं तिक्कं लौहं शीतं सरं गुरु ।  
 रुक्मं वयस्यं चक्षुस्यं लेखनं वातलं हि तत् ॥  
 कफं पित्तं गरं शूलं शोथार्शःऽग्निहपाण्डुताः ।  
 मेदोमेहक्रिमीन् हन्ति सेवनात् तद् यथाविधि ॥

( २ )

आयुः प्रदाता बलवीर्यकर्त्ता रोगापहर्ता मदनस्यधाता ।  
 अयः समानं नहि किञ्चिदस्ति रसायनं श्रेष्ठतमं  
 नराणाम् ॥

# Chapter I.

## LAUHA (IRON).

*Properties of lauha.*

( 1 )

Iron is sweet, astringent, and bitter in taste ; cold ; laxative ; heavy ; coarse ; preventer of senile-decay ; improver of eye-sight ; reducer of fat ; and increaser of a little of vayu (wind) in the system. It pacifies an excess of kapha (phlegm) and pittam (animal heat) ; and cures toxin, colic, swelling of the body, piles, spleen, anemæa, obesity, spermatorrhœa and worms.

(2)

Iron increases strength and longevity. It cures diseases and is an aphrodisiac. It is one of the best remedies for senility.

लौहस्य सामाविकदोषाः ।

गुरुता दृढ़ता क्लेदः कश्मलं दाहकारिता ।  
अश्मदोषो मलघ्रहो दोषाः सप्तायसस्य तु ॥  
शोधितब्यमतस्तद्धि मारणीयं यथाविधि ।  
अशोधितममारितं लौहं ज्ञेयं महाविषम् ॥

*Natural blemishes of iron.*

The following are the seven blemishes of iron :— heaviness, hardness, mixture with foreign matters,

power of causing hysteria, power of causing inflammation, evil characteristics of stone, and power of causing constipation.

द्रुष्ट्वौहसेवनस्य फलम् ।

षण्डत्वकुष्ठामयमृत्युदं भवेद् हृदरोगशूलौ  
कुरुतेऽश्मरीञ्च ।  
नानारुजानाञ्च तथा प्रकोपं करोति हृल्लास  
मवैधलौहम् ॥

*Evil effects of taking impure iron.*

Iron, not properly purified and incinerated, gives rise to the following :—impotency, leprosy, death, heart disease, colic, stone disease, hiccough, and even augmentation of many of the diseases the patient has already been suffering from.

लौहस्य प्रकाराः ।

( १ )

सामान्याद् द्विगुणं क्रौञ्चं कालिङ्गोष्टगुणःस्मृतः ।  
कालिङ्गाद् दशधा भद्रं भद्राद् वज्रं सहस्रधा ॥  
वज्राच्छतगुणं पाणिष्ठ्य नीरवं दशभिर्गुणैः ।  
तस्मात् सहस्रगुणितमयः कान्तं महागुणम् ॥\*

*Varieties of iron.*

Iron is of the following different kinds :

---

\* पाठोऽयं रसेन्द्रचिन्तामणेस्तथा रामराजीयादुदृतः ॥

(a) Samanya or ordinary, (b) Krauncha (c) Kalinga  
 (d) Bhadra (e) Vajra (f) Pandi (g) Niraba, and (h)  
 Kanta.

Of these, (b) is twice as efficacious as (a); (c) is eight times as efficacious as (a); (d) is ten times as efficacious as (c); (e) is thousand times as efficacious as (d); (f) is hundred times as efficacious as (e); (g) is ten times as efficacious as (f); and (h) is thousand times as efficacious as (g). \*

( २ )

मुण्डं तीक्ष्णं तथा कान्तं त्रिविधं लौहमुच्यते ।

मुण्डात् तीक्ष्णं ततः कान्तं प्रशस्तं ज्ञायते बुधैः ॥

\* This classification was in vogue at the time of King Rama Chandra, the hero of Ramayana. The present day Indians are unable to identify these different kinds of iron. Such ancient chemists as Nityanatha, Bagbhat, etc. were also ignorant of this classification. This is due to an incredibly great decline in our knowledge of industrial chemistry since the time of the great Rama Chandra. That the ancient Indians attained a high degree of scientific knowledge is evident from the famous iron pillar of Delhi, which, according to the inscription, was erected as a monument by King Chandra who was most probably the founder of the Chandra dynasty (wrongly translated as "Lunar :Dynasty") This huge pillar has been exposed, for several thousands of years, to the roughness and extreme variations of a tropical climate, but no rust has grown on its amazingly smooth and glossy surface. The same remarks apply to the cannons lying in Visnupur (Bengal) and to the iron beams used in the famous temple (now in ruins) of Konarka in Orissa.

It is a matter of wonder and great significance that the ancient Hindus were able, long, long before the birth of Christ, to forge such huge pillars and beams; and to prepare a kind of iron the like of which modern scientists have not yet been able to produce. It is a sheer want of encouragement that accounts for the present state of deplorable forgetfulness in this direction.

( २ )

Iron is of three different kinds, viz. (a) Munda (b) Tikshna, and (c) Kanta. The second is better than the first and the third is better than the second.

### (क) मुण्डम् (पूतिलौहम्) ।

मृदु कुराठं कडारच्च त्रिविधं मुण्डमुच्यते ।  
 द्रुतद्रावमविस्फोटं चिक्कणं मृदु तच्छुभम् ॥  
 हतं यत् प्रसरेद् दुःखात् तत् कुराठं मध्यमं स्मृतम् ।  
 यद्धतं भज्यते कृष्णं हीनं स्यात्तत् कडारकम् ॥

#### (α) *Munda or ordinary iron.*

Munda or ordinary iron is of three different kinds, viz. mridu (soft), kuntha (obdurate), and karara (brittle).

Mridu or soft is that which melts quickly and has a smooth and glossy surface.

Kuntha or obdurate is that which can be expanded with much difficulty by hammering.

Karara or brittle iron is that which breaks easily, when hammered, and presents black surfaces when broken.

Of these three, the first is comparatively commendable, the second is of moderate efficacy, and the third is the least efficacious for medicinal purposes.

श्रेष्ठमुण्डस्य गुणाः ।

मुण्डं परं मृदुलकं कफवातशूल  
मूलाममेहगदकामलपाण्डुहारि ।  
गुलमामवातजठरार्तिहरं प्रदीपि  
शोफापहं रुधिरकृत् खलु कोष्ठशोधि ॥

*Properties of excellent Munda iron.*

Soft iron of superior qualities (duly incinerated) is efficacious in the following diseases :—excess of kapha (phlegm), colic due to excess of vayu (wind), piles, dysentery, spermatorrhœa, jaundice, anemia, gulma, rheumatism, diseases affecting the belly, and dropsy. It increases blood, and appetite, and purifies the stomach.

(ख) तीक्ष्णम् ।

खरं सारञ्च ह्रन्नलं तारापटञ्च वज्रकम् ।  
काललौहाभिधानञ्च षड् विधं तीक्ष्णमुच्यते ॥

*(b) Tikshna iron.*

There are six different kinds of tikshna iron, viz. (1) khara (2) sara, (3) hrinnala (4) tarapatta (5) bajraka and (6) kala. \*

\* Import of cheaper iron products from foreign countries has led to the total ruin of iron industry of an indigenous character in India. The last generation of iron smiths who were acquainted with the different kinds of iron, as described here, became totally extinct about 50 years back. The classification, as given here, has therefore nothing but a historical interest for us.

(१) खरम् ।

परुषं पोगोरोन्मुक्तं भङ्गे पारदवच्छवि ।  
नमने भंगुरं यत् तत् सारलौहमुदाहृतम् ॥

(1) Kharā.

Khara iron is that which is coarse, inflexible, and devoid of pogara \* or carved lines on its surface. This iron, when broken into pieces, presents sectional surfaces as glazy as mercury.

(२) सारलौहम् ।

(क)

घातभङ्गुरधारं यत् सारलौहं तदीरितम् ।  
पोगराभासकं पाण्डुभूमिजं सारमीरितम् ।†

(2) Sara iron (Steel ?).

(a)

This is a kind of tikshna iron which breaks into pieces, when hammered, and has pogara or carved lines on its surface. It is obtained from ores of yellowish colour. \*\*

\* पोगरमित्यलक्षवत् कुटिलरेखा: ।

बङ्गच्छाया च बङ्गश्च पोगरस्याभिधा त्रयम् ।

चिकुरं भङ्गुरं लोहात् पोगरं तत् परं मतम् ॥

† पाण्डुभूमिजं स्थले पाठान्तरम् पाण्डयभूमिजम् ।

\*\* According to another version, it is obtained from a province called "Pandya" (Pandra in Manbhumi?)

\* Anga-chhaya and banga are the two synonyms of pogara (carved

(ख)

क्षमाभृच्छिखराकारारण्डगन्यम्लेन लेपिते ।  
लौहे स्युर्यत्र सूक्ष्मानि तत् सारमभिधीयते ॥

(ब)

Sara iron is hard. Its surfaces give rise to hard and fine figures having the appearance of mountain peaks, if smeared with some kind of amla (sour vegetable juice).

(३) हृन्नाललौहम् ।

कृष्णपारदुवपुश्चञ्चुबीजतुल्योरुपोगरम् ।  
छेदने चातिपरुषं हृन्नालमिति कथ्यते ॥

( 3 ) Hrinnala iron.

Hrinnala has a yellowish black colour. It has, on its surfaces, pogara of the shape of bird's beaks. It presents very coarse sectional surfaces at the places where it is cut into pieces.

(४) तारापट्ट लौहम् ।

गौरीपट्टाकारं लौहं तारापट्टं विकथ्यते ।  
निर्मीयते शिलापैश्च यत्नेन लौहमृत्तिकात् ॥\*  
सूक्ष्मोगरसंयुक्तं कृष्णाभं गुरु चिक्कणम् ।  
वर्षाम्बुरौद्रवायुभि नंक्षीणं जायते हि तत् ॥

lines on the surface of some kind of steel). The best pogara is smooth, glazy, and capable of being obliterated by means of friction with a piece of metal.

\* शिवलिङ्गमध्यमागस्थदीपाकारप्रदेशः गौरीपट्टमिति कथ्यते ।  
शिलापः ( शिला + पा + ड ) प्रस्तरविद्यानिषुणः लौहकारः सराप्  
इति भाषा ।

## (4) Tarapatta iron.

Tarapatta iron is obtained from iron ores by a class of smiths who are specialists in the science of ores. This iron is black, smooth, glazy, and has very fine pogara (carved lines) on its surface. This is prepared in the shape of a spoon (minus the handle). It is a kind of iron which never rusts, even if it is exposed to the sun, rains, and wind.\*

## (५) वज्रलौहम् ।

पोगरैर्वज्रसंकाशैः सूच्मरेखैश्च सान्द्रकैः ।  
निचितं श्यामलाङ्गनं वज्रकं तत् प्रकार्त्तिम् ॥

## (5) Bajra iron.

Bajra iron is that which has got on its surface plenty of fine and deep-seated lines—straight and carved (pogara)—of the appearance of an electric flash (bajra), and is of a glossy black colour.

## (६) काललौहम् ।

नीलकृष्णप्रभं सान्द्रं मसूरां गुरु भासुरम् ।  
लौहधातेऽप्यभङ्गात्सधारं कालायसं मतम् ॥

\* This is most probably the iron out of which the wonderful iron pillar of Delhi, the iron beams in the ruins of konarka temple, the cannons in vianupur etc. were prepared. The art of preparing such iron is now hopelessly lost.

(6) ala or Black iron.

Kala iron is heavy and of a deep blue-black colour. Its surface is glossy, heavy, and bright. It can not be broken into pieces by being hammered upon by means of another piece of iron.

तीक्ष्णलौहस्य गुणाः ।

( १ )

रुक्षं स्यात् खरलौहकं सुमधुरं पाकेऽथ वीर्येहिमं  
तिक्ष्णोषणं कफपित्तकुष्ठजठरम्प्रोहामपाण्डुर्चिन्तुत् ।  
सद्यः शूलयकृदगदक्षयजरामेहामवातापहं  
दीप्तं चातिरसायनं बलकरं दुर्णामदाहापहम् ॥  
खरलौहात् परं सर्वमेकैकस्माद् गुणोत्तरम् ॥

*Properties of tikshna iron.*

( १ )

Khara iron is coarse and warm in touch, bitter in taste, but it turns sweet, when digested in the stomach. It produces a cooling effect upon the system. It is efficacious in the following diseases :—excess of kapha and pittam, leprosy, udara-roga, enlargement of the spleen, mucus, jaundice, colic, derangement of the liver, wasting diseases, senility, spermatorrhœa, inflammation, and rheumatism. It increases strength and appetite and prevents and cures senile decay, if taken in the manner prescribed hereafter. Each of the varieties of iron named after “ khara ” is superior in quality to that which precedes it.

( २ )

लौहं साराहृयं हन्याद् ग्रहणीमतिसारकम् ।  
 अच्छं सब्वाङ्गजं वातं शूलञ्च परिणामजम् ।  
 अद्विञ्च पीनसं पित्तं श्वासं कासं व्यपोहति ॥

( २ )

Sara iron cures the following diseases, if taken in the prescribed way :—diarrhoea, both chronic and acute, paralysis affecting the whole or half of the body, colic felt at the time of digesting food, nausea, pinasa, diseases due to an excess of pittam, asthma, and cough.

(ग) कान्तलौहम् ।

तस्य लक्षणम् ।

( १ )

पात्रे यस्मिन् प्रसरति जले तैलविन्दुर्लिप्तं \*  
 गन्धं हिंगु त्यजति च तथा तिक्ततां निम्बकल्कः ||||  
 पाके दुग्धं व्रजति शिखराकारतां नैति भूमिं  
 कृष्णाङ्गं स्यात् सजलचणकः कान्तलौहं तदुक्तम् ॥

(c) *Kanta iron (an oxide of iron having the magnetic power of attracting iron.)*

\* न लिप्तमित्यस्य स्थले प्रतसे इत्येतत् पाठान्तरं दूश्यते ।

\*\* निम्बकल्कः इत्येतस्य स्थले निम्बवल्कः इत्येतत् पाठान्तरं दूश्यते ।

Its characteristics.

( १ )

Kanta iron is of such a nature that a drop of oil thrown into water contained in a pot of this iron does not spread over the surface of the water ; neither does the oil stick to the inner surface of the pot. Hingu (asafœtida) kept in a pot of this iron loses its smell in course of time. Bark of nimba tree (which is very bitter in taste), pestled with water, loses its bitterness, if kept for some time in a pot of this iron. Milk, boiled in a pot of this iron, may swell up, but will not overflow the borders of the pot, and will not flow into the ground.

( २ )

कान्तं मृदुतरं ताराद् रुक्षात्म तिमिराकरम् ।  
स्वादुर्यतो भवेन् निष्कल्पको रात्रिनिवेशितः ।  
पानीयं कथितं चास्मिन् हिंगुगन्धसमं भवेत् ॥  
कान्तं तदुत्तमं यज्ज्ञ रूप्येनावर्त्तिं मिलेत् ।  
सर्वरोगहरं ह्येतत् सर्वकुष्ठहरं परम् ॥

( २ )

Kanta iron is softer than silver. It is coarse and black in colour. Water boiled in a pot of kanta iron acquires the smell of hingu (asafœtida). Kanta iron of superior quality is generally found to be in the form of ores covered with silver. Such a kanta iron (i.e. kanta iron found in ores rolled in silver) can

cure all sorts of diseases, if applied in the prescribed way, including all sorts of leprosy.

( ३ )

यत् पात्राद्युषिते तोये तैलविन्दु न सर्पति ।  
तारेणावर्त्तते यत् तत् कान्तलौहमिति स्मृतम् ॥१०

( ३ )

Kanta iron is that which is found to be mixed with silver.

कान्तलौहस्य भेदाः ।

भ्रामकं चुम्बकं चैव कर्षकं द्रावकं तथा ।  
एवं चतुर्विंधं कान्तं रोमकान्तश्च पञ्चमम् ॥  
एकद्वित्रिचतुर्स्पञ्चं सर्वतोमुखमेव तत् ।  
पीतं कृष्णं तथा रक्तं त्रिवर्णं स्यात् पृथक् पृथक् ॥  
स्पर्शवेदि भवेत् पीतं कृष्णं श्रेष्ठं रसायने ।  
रक्तवर्णं तथा वाऽपि रसबन्धे प्रशस्यते ॥  
भ्रामयेद्वौहजातं तु तत् कान्तं भ्रामकं मतम् ।  
चुम्बयेद्वौम्बकं कान्तं कर्षयेत् कर्षकं तथा ॥

\* “कान्तलौहमिति” स्मृतम् इत्यस्य स्थले “कान्तलौहं शुभं स्मृतम्” हत्येतत् पाठान्तरं दृश्यते ।

साक्षाद् यद् द्रावयेल् लौहं तत् कान्तं द्रावकं भवेत् ।  
 तद् रोमकान्तं स्फुटिताद् यतो रोमोदृगमो भवेत् ॥  
 भ्रामकं तु कनिष्ठं स्याच् चुम्बकं मध्यमं तथा ।  
 उत्तमं कर्षकं चैव द्रावकम् चोत्तमोत्तमम् ॥  
 कनिष्ठं स्यादेकमुखं मध्यं द्वित्रिमुखं भवेत् ।  
 चतुर्स्यच्चमुखं श्रेष्ठमुत्तमं सर्वतोमुखम् ॥

*Varieties of kanta iron.*

Kanta iron is of five different kinds, viz. bhramaka, chumbaka, karshaka, dravaka, and romakanta. They may have one, two, three, four, five or more than five mouths or points. They may be of three different colours, viz. yellow, black, and red. Of these the yellow variety (populary called the philosopher's stone) can transform base metals by mere touch. \* The black variety is commendable in medicines and the red variety in medicines as well as in the act of solidification of mercury.

Bhramaka iron is that which makes a piece of ordinary iron revolve round it. Chumbaka kanta (load stone) is that which can cling to pieces of ordinary iron. Karshaka kanta is that which can attract to it pieces of ordinary iron. Dravaka kanta is that at the touch of which ordinary iron melts (without any heat being applied). Roma-kanta is that which causes the growth of fresh hair at that part of the skin which is lightly pierced through by it.

\* It is an ore found in nature and is, therefore, to be distinguished from a kind of Philosopher's stone that can be prepared ( vide page 235, Vol. I ).

Of these four varieties, Bhramaka is the least efficacious. Chumbaka is superior to Bhramaka. Karshaka is superior to Chumbaka, and Dravaka is the most efficacious of all these varieties.

The kanta iron which has got only one mouth (or magnetic point) is the least efficacious ; that with two or three mouths is of moderate efficacy ; and that with four or five mouths is excellent. The kanta iron which has got several mouths is the best of all.

भ्रामकादीनां विशेषगुणाः ।

भ्रामकं चुम्बकं चैव व्याधिनाशे प्रशस्यते ।

रसे रसायने चैव कर्षकं द्रावकं हितम् ॥

मदोन्मत्तगजः सूतः कान्तमंकुशमुच्यते ।

खनिगर्भाद् ग्रहीतव्यं तत् प्रयत्नेन धीमता ।

मारुतातपविद्धिसं वर्जयेद्वात्र संशयः ॥

*Special features of Bhramka, etc.*

Kanta iron of the name of Bhramaka and Chumbaka are commendable for use in medicines intended for cure of diseases. Karshaka and Dravaka are commendable for use in mercurial operations and in medicines intended for cure of diseases as well as for prevention and cure of senile decay. Mercury can be compared to a wild elephant, whereas kanta iron to a goad which serves to control its wildness.

Kanta iron is to be obtained direct from mines. The kanta iron which has been kept exposed to sun and air should be avoided in medicines.

कान्तलौहस्य गुणः ।

कान्तायोऽतिरसायनोन्तरतरं स्वस्थे चिरायुःप्रदं  
स्तिंगधं मेहहरं त्रिदोषशमनं शूलाममूलापहम् ।  
युलमप्लीहयकृत्क्षयामयहरं पाण्डुदरव्याधिनुत्  
तिक्कोष्णं हिमवीर्यकं किमपरं योगेन सर्वार्त्तिं नुत् ॥

*Properties of kanta.*

Kanta iron is bitter in taste, warm in touch, but produces a cooling effect in the system. It is a good rasayanam (*i.e.* a medicine which, if used in the prescribed manner, can prevent and cure diseases and senility). It imparts long life to a healthy man (who takes it regularly). It is soothing. If taken with suitable anupanam, it can cure all the diseases, especially, spermatorrhœa, colic, dysentery, excess of the three doshas, piles, fistula, gulma, enlargement of the spleen and liver, phthisis, jaundice, and udara-roga.

लौहस्य शोधनम् ।\*

प्रथमोविधिः ।

पत्तलीकृतपत्रानि लौहस्यामौ प्रतापयेत् ।  
निषिञ्चेत् तस्तसानि तैले तक्रे च कांजिके ॥  
गोमूत्रे च कुलत्थानां कषाये च त्रिधा त्रिधा ।  
एवं लौहस्य पत्राणां विशुद्धिः संप्रजायते ॥

*Purification of iron. \*\*\**

\* शोधनार्थं पत्तलीकृतं लौहपत्रमेव सर्वदा व्यवहार्यम् ।

\*\* Iron is, first of all, to be heated and hammered into thin leaves before it is purified.

### First process.

(See Second process, page 242, vol. II.)

द्वितीयोविधिः ।

शशच्चतजसंमिश्रं त्रिवारं परितापितम् ।  
मुण्डादिसकलं लौहं सर्वदोषान् विमुच्यते ॥

### Second process.

All sorts of iron leaves are purified (medicinally, of course), if they are heated three times and immersed each time in the blood of hare.

तृतीयोविधिः ।

ततः चाराम्लसंलिप्तं शशरक्तेन वापितम् ।  
कान्तलौहं भवेच्छूद्धं सर्वदोषविवर्जितम् ॥

### Third process.

Kanta iron is purified, if it is heated after having been smeared with ksharas and amlas, and then immersed in the blood of hare.

चतुर्थोविधिः ।

काथ्यमष्टगुणे तोये त्रिफला षोडशं पलम् ।  
ततकाथे पादशेषे तु लौहस्य पलपञ्चकम् ॥  
कृत्वा पत्राणि तसानि सप्तवारं निषेचयेत् ।  
एवं प्रलीयते दोषो गिरिजो लौहसम्भवः ॥

### Fourth process.

Sixteen palas of triphala are to be boiled with 128 palas of water until it is reduced to 32 palas. Five palas of iron leaves are to be heated seven times and immersed each time into this water. This results in the purification of the iron.

पञ्चमोविधिः ।

सामुद्रलवणोपेतं तसं निर्वापितं खलु ।  
त्रिफलाकथिते नूनं गिरिदोषमयस्त्वजेत् ॥

### Fifth process.

Iron leaf is purified, if it is coated with a dense solution of sea salt, then heated, and cooled next by immersion into a decoction of triphala.

षष्ठ्यसप्तमी विधी ।

चिञ्चाफलदलकाथादयो दोषमुदस्यति ।  
यद्वा फलत्रयोपेतं गोमूत्रे कथितं लग्नम् ॥

### Sixth and Seventh processes.

Iron is purified, if it is boiled with decoction of leaves or fruits of tamarind.

It may also be purified, if it is boiled for some time with decoction of triphala, prepared with cow's urine (and not water).

अष्टमोविधिः ।

द्वितीयखण्डे २४२ पृष्ठे तृतीयीविधि द्रष्टव्यः ।

### Eighth process.

(See Process No. 3, page 242, Vol, II )

नवमोविधिः ।

लवनानि तथा द्वारौ शोभाञ्जनरसे चिपेत् ।  
 अम्लवर्गयुतेनादौ दिनं घर्मे विभावयेत् ॥  
 तद् द्रवैदैलिकायन्त्रे दिवसं पाचयेत् सुधीः ।  
 कान्तपाषाणशुद्धौ हि तदेव मारयेत् ततः ॥

### NINTH PROCESS.

A solution is to be made of the five salts, the two ksharas, the juice of shobhanjana, and the amla-varga.\* This is to be exposed to the heat of the sun for one day. Kanta iron is purified, if it is boiled for one day by means of a Dola-Jantram containing this solution.

लौहस्य मारणम् ।

सब्वेषां धातुकल्पानां लौहकल्पं प्रशस्यते ।  
 तस्मात् मर्वप्रयत्नेन लौहमादौ विमारयेत् ॥

\* For amla-varga, see page 301, Vol I.

Details of salts and ksharas will be given later in the present volume.

नायः पचेत् पञ्चपलादब्बागूर्जुँ त्रयोदशात् ।  
आदौ मन्त्रस्ततः कर्म कर्तव्यं मन्त्र उच्यते ॥  
ओं अमृतोऽद्वाय स्वाहेत्यनेन लौहमारणम् ॥

ओं अमृतोऽद्वाय स्वाहा । इति मर्हनमन्त्रः ।  
ओं अमृतोऽद्वाय हं स्वाहा । ओं अमृते हुं कट् ।  
ओं नमश्चण्डवज्रपानये महायक्षासनाधिपतये हुं । सुरासुर  
यक्षमहाविद्यावलाय स्वाहा । ओं अमृते हुं इति वलिदानमन्त्रः ।

*Incineration of Iron.*

Medicines, in which iron is the leading ingredient, are better than those in which any other of the remaining metals ( except mercury ) forms the main ingredient. Iron is therefore to be incinerated very carefully.

Iron is not to be incinerated in quantities less than five palas and more than thirteen palas at a time. The following mantra ( sacred text ) is to be uttered just before the commencement of the process, leading to the incineration of iron :—

“ Om amritodbhavaya Swāhā” etc.

लौहमारणस्य प्रथमोविधिः ।

सूतकाद्दिगुणं गन्धं दत्त्वा कुर्याच्च कज्ज्वलीम् ।  
द्वयोः समं लौहचूर्णं मर्दयेत् कन्यकाद्रवैः ॥  
यामयुग्मं ततःपिण्डं कृत्वा ताम्रस्य पात्रके ।  
घर्मे धृत्वा रुवूकस्य पत्रैराच्छादयेद् तुधः ॥

यामद्वयाद् भवेदुषणं धान्यराशौ न्यसेत् ततः ।  
 दत्तोपरि शरावं तु त्रिदिनान्ते समुच्छरेत् ।  
 पिष्टा च गालयेद् वस्त्रादेवं वारितरं भवेत् ॥  
 कान्तं तीक्षणश्च मुराढश्च निस्तथं जायते ध्रुवम् ।  
 स्वर्णादीन् मारयेदेवं चूर्णं कृत्वा च लौहवत् ॥  
 सत्योऽनुभूतो योगीन्द्रैः क्रमोऽयं लोहमारणे ।  
 कथितं रामराजेन साकेतेशेन धीमता ॥  
 कौतूहलधिया येन शिक्षिता दण्डके पुरा ।  
 सिद्धयोगिमहर्षिभ्यो विदैयषा रससंज्ञका ॥

*Incineration of iron.*

*First process.*

See fourth process, page 247, Vol II.

त्रितीयोविधिः ।

मृतसूतस्य पादेन प्रलिप्तानि पुटानले ।  
 पचेत् तुल्येन वा ताप्यगन्धाश्महरतेजसा ॥

*Second process.*

Iron is incinerated by being rubbed with one fourth its quantity of incinerated mercury, and subjected to putam. It may also be incinerated, if rubbed with an equal quantity of swarnamakshika, gandhaka, and mercury, all combined, and then subjected to putam.

तृतीयोविधिः ।

तीक्ष्णलौहस्य पत्रानि निर्दलानि दृढेनले ।  
 ध्मात्वा क्षिपेजले सद्यः पाषानोलुखलोदरे ॥  
 खण्डयेदगाढनिर्धातैः स्थूलया लौहपारया ।  
 तन्मध्ये स्थूलखण्डानि रुच् । मल्लद्रयान्तरे ॥  
 ध्मात्वा क्षिप्त्वा जले सम्यक् पूर्ववत् करण्डयेत् खलु ।  
 तच्चूर्णं सूतगन्धाभ्यां पुटेद्विंशतिवारकम् ॥  
 पुटे पुटे विधातव्यं पेषनं दृढवत्तरम् ।  
 एवं भस्मीकृतं लौहं तत्तद्रोगेषु योजयेत् ॥

### Third process.

Tikshna iron is to be hammered into fine sheets, devoid of layers. These are to be heated red hot and immersed into water. They are then to be reduced to powder by means of an iron bar in a stone mortar. Portions of the sheets, too hard to be powdered, are to be confined within two earthen basins, subjected to strong heat, and then immersed into water. When cooled, they are to be reduced to powder, being hammered in the aforesaid way. The powder, thus obtained, is to be rubbed with mercury and sulphur, and subjected to putam for twenty times. Rubbing very steadily is to be resorted to, previous to each act of putam. (Juice of kanya or lemon juice or kanji may be used for the purpose of rubbing in this case).

चतुर्थोविधिः ।

हिंगुलस्य पलान् पञ्च नारीस्तन्येन पेषयेत् ।  
 तेन लौहस्य पत्रानि लेपयेत् पलपञ्चकम् ॥  
 रुद्ध् । गजपुटे पचेत् कषायैत्वैफलैः पुनः ।  
 जम्बीरैरारणालै वा विंशत्यंशेन हिंगुलम् ॥  
 पिष्टा रुद्ध् । पचेत्त्वैहं तदद्वैवः पाचयेत् पुनः ।  
 चत्वारिंशत् पुटैरेवं कान्तं तीचणं च मुराढकम् ।  
 त्रियते नात्र सन्देहो दत्त्वा दत्त्वैव हिंगुलम् ॥  
 अथ पूब्वोदितं तीचणं वसुभज्ञकवासयोः ।  
 पुटितं पत्रतोयेन त्रिंशद्वारैः प्रयत्नतः ।  
 शोणितं जायते भस्म कृतसिन्दूरविभ्रमम् ॥

#### Fourth process.

Twenty tolas of fine iron sheets are to be smeared with an equal quantity of hingula, previously rubbed with human milk, and then subjected to gajaputam. The iron is then to be subjected to forty more acts of putam, previously rubbed each time with one tola of hingulam mixed with the following alternately :—(1) decoction of triphala and (2) lemon juice or aranala. The iron, thus incinerated, is again to be subjected to thirty more acts of putam, having been rubbed each time with one tola of hingula mixed with the juice of white punarnava and basaka. The iron thus grows as red as red vermillion.

पञ्चमोविधिः ।

अहिमाराहिदमनीवासावजलतार्जुनैः ।  
स्त्रीस्तन्ये हिंगुलेनायः पचेल्लिप्त्वा पुटेनले ॥

### Fifth process.

Iron sheets are reduced to ashes, if they are subjected to putam, after having been smeared with hingula, rubbed with human milk, and the juice of the following: —ahimara, ahidamani, basaka, asthi-sanghara, and arjuna.

षष्ठोविधिः ।

जम्बीररससंयुक्ते दरदे तस्मायसम् ।  
बहुवारं विनिक्षिप्तं म्रियते नात्र संशयः ।

### Sixth process.

Iron is incinerated, if it is heated red hot and then immersed for several times in a solution made of lemon juice, salt, and cinnabar.

सप्तमोविधिः ।

शुच्छं लौहं विचूर्णितं तदनु गोतोये विभाव्यं दिने ।  
रात्रौ चैव पुटाश्च विंशतिमिताः शरावसंपुटे शुभे ॥  
एवं वै त्रिफलाजलस्य कथितविधिना षष्ठि पुटाः ।  
कन्याया रसभावनाश्च कथिताश्चाष्टौ च वैद्यैः पुटाः ॥

वज्रार्कहलिनींगुदीद्विरजनोगुंजातुरंगधन-  
 निर्गुंडीगरुडीकुठेरकनकवह्निकमत्स्यालता-  
 हेमहंसपदीजटामृतलताभृंगेन्द्ररसैर्दिने ।  
 रात्रौ तद्रसैश्च पृथक् पृथगहोससैव भावाः पुटाः ॥  
 राजोतक्रयुतं सुखल्वकतलेपिष्टा दिनैकं दृढम् ।  
 भावाश्चैवं पुटाश्च सस कथिताः सर्वैश्च वैद्याधिपैः ॥  
 पश्चाञ्चावपुटाश्च पञ्च सततं पञ्चामृतानां पुनस्तच्छृणु  
     दशांशदरदयुतं मध्यं च क्षीरे स्थियाम् ॥११  
 गोदुग्धे च दिवात्रयोषि संततं पिष्टा च भावाः ।  
 पुटेत् पश्चादद्व्युपारदेन शुचिना गंधेन कन्यारसैः ॥  
 तच्छृणु परिमद्येहु दृढतरं संपाचयेत् संपुटे  
 पश्चात् केवलं कन्यकाशुचिरसैर्भस्म त्रिशः पाचयेत् ॥  
 पश्चात् कज्ज्वलीसन्निभं जलतरं शुद्धं च लौहं  
     भवेत् ।  
 एवं प्रोक्तं वलाजलैः परिहतं तज्जौहमुक्तं शुभम्

### Seventh process.

Purified and powdered iron is to be subjected to bhavanas with cow's urine in day time and heated by putam at night. This process is to be performed

\* दधि दुरध्यं घृतञ्चैव शर्करासंयुतं मधु ।

पश्चामृतमिदं प्रोक्तं विधेयं शुभकर्मसु ॥

for twenty times. The iron is then to be treated similarly for sixty times with the decoction of triphala, and with the juice of kanya for eight times. This is then to be subjected to bhavana for seven times in day time and as many times at corresponding nights, with the juice of each of the following plants, and subjected to heat by putam after each act of bhavana :— Bajra, arka, halini, ingudi, haridra, daruharidra, gunja, ashwagandha, nagaramustha, nirgundi, patala-garuri, bana-tulashi, dhattura, chitraka, matsyakshi, red hansapadi, jatamamsi, amrita-lata (a kind of guduchi growing in the amarkantaka forest), bhringaraja, and indra-baruni.

The iron is thus to be rubbed steadily for one day with raji and butter-milk and heated by putam. This process is to be performed for seven times. The iron is then to be rubbed with each of the five things known by the name of panchamritam (viz. curd, milk, ghee, honey, and sugar), and subjected to putam each time. The iron is then to be rubbed with human milk for sometime, and with cow's milk for three days at a stretch, and then heated by putam. The product is then to be mixed with half its quantity of purified mercury and the same quantity of purified sulphur, and then rubbed with the juice of kanya to be heated by putam. Next the iron is to be rubbed with the juice of kanya only, for three times, and heated by putam every time. The ashes, thus prepared, may then be rubbed with the juice or decoction of balā only, and used according to requirements.

अष्टमोविधिः ।

तीक्ष्णादलोऽहुतं सूक्ष्मरजश्च त्रिफलाजलैः ।  
पिष्ठा दत्त्वाौदनं किंचिच्चक्रिकां प्रविधाय च ॥  
शोषयित्वाऽति यत्नेन प्रपचेत् पञ्चभिः पुटैः ।  
रक्तवर्णं हि तद्भस्म योजनीयं यथायथम् ॥

### **Eighth process.**

Tikshna iron, finely powdered, is to be rubbed with decoction of triphala and a little of powdered rice or wheat, and made into small cakes which are to be dried and subjected to putam. Performance of this process for five times leads to the reduction of iron to red-coloured ashes.

नवमोविधिः ।

मतस्याक्षीगन्धवाहीकैर्लकुचद्रवपेषितः ।  
विलिप्य सकलं लौहं मतस्याक्षीकलकपेषितम् ॥  
भस्त्राभ्यां सूहृद्धं ध्मात्वा त्रिशूलीनिर्गमावधि ।  
अथोद्धृत्य त्रिपेत् क्वाथे त्रैफले गोजलात्मके ॥  
तस्मादाहृत्य संताङ्ग्य मृतमादाय लौहकम् ।  
पुनश्च पूर्ववत् ध्मात्वा मारयेदखिलायसम् ॥  
मद्यित्वा ततोगन्धगुडत्रिफलजोदकैः ।  
पुटैऽन्निःशतसंख्यकैश्च निरुत्थं भस्म जायते ॥

Ninth process.

Iron sheet, smeared first of all with a paste made of matsyakhi, and then with another paste made of the juice of lakucha fruit, matsyakhi plant, and saffron, is to be heated strongly by means of two bellows till the rise of flames. This is then to be immersed in a decoction of triphala mixed with cow's urine. The iron is then to be hammered into fine powders. The part which has not been incinerated are again to be heated and incinerated in the afore-said way. The ashes, thus obtained, are to be subjected to putam for thirty times after having been rubbed each time with sulphur, molases, and decoction of triphala. The ashes, thus prepared, are incapable of being restored to their original state i. e., the state of iron before incineration.

दशमोविधिः ।

समगन्धमयश्चूरां कुमारीवारिमहिं तम् ।  
कियत्कालं पुटीकृतं चूर्णितं म्रियते ध्रुवम् ॥

Tenth process.

Powdered iron is incinerated, if it is subjected to putam after having been rubbed for sometime with an equal quantity of sulphur and a sufficient quantity of juice of kanya.

एकादशोविधिः ।

गोमूत्रैत्रिफला काथ्या तत्कषायेन भावयेत् ।  
त्रिससाहं वरं लौहं दिनैकं मह्द्येत् पुनः ॥

रुच्छा । गजपुटे पाच्यं ततः काथेन मद्येत् ।  
 दिवा मद्यं पुटेद्वात्रावेकविंशत्यहावधि ॥  
 एकविंशतिसंपुटैर्निर्यते त्रिविधं ह्ययः ॥

### Eleventh process.

Iron of excellent quality is to be subjected to bhavana for twenty one days with cow's urine, previously boiled with triphala. It is then to be rubbed for one day with the above decoction and subjected to heat by gajaputam. Next it is to be rubbed during day time with the above decoction, and subjected to putam at night. Performance of the process for twenty one days, leads to the incineration of the iron.

### द्वादशोविधिः ।

शुच्छलौहभवं चूर्णं पातालगरुडीरसैः ।  
 मद्यित्वा पुटेद्वङ्गौ दद्यादेवं पुटत्रयम् ॥  
 पुटत्रयकुमार्याश्च कुठारछिन्नाया रसैः ।  
 पुटषट्कं ततो दद्यादेवं तीक्षणं मृतं भवेत् ॥

### Twelfth process.

Purified and powdered iron is to be rubbed with juice of patalagaruri and heated by putam. This is to be performed thrice. It is similarly to be treated with the juice of kanya for three times, and for six times with the juice of kuthara-chhinna. This will lead to the incineration of the tikshna iron.

त्रयोदशोविधिः ।

द्वादशांशेन दरदं तीक्षणचूर्णेन मेलयेत् ।  
कन्यानीरेन संभव्य यामयुग्मं तु तत् पुनः ॥  
शरावसंपुटे कृत्वा पुटेह गजपुटेन च ।  
सप्तधैवं कृतं लौहरजो वारितरं भवेत् ॥

### Thirteenth process.

Powdered and purified tikshna iron, mixed with one twelfth its weight of cinnaber, is to be rubbed for six hours with the juice of kanya, and then subjected to heat by putam. This process is to be performed for seven times leading to the incineration of the powder, which will be so light as to float upon the surface of water.

चतुर्दशोविधिः ।

लौहचूर्णं पलं चैवोषरकस्य पलं तथा ।  
अश्वगन्धा पलं चापि सर्वमेकत्र मद्येत् ॥  
कुमार्यन्दिर्दिनं पश्चात् गोलकं चृभुपत्रकैः ।  
संवेष्ट्य च मृदा लिप्त्वा पुटेह गजपुटेन च ॥  
खांगशीतं समुद्धृत्य सिंदूराभमयोरजः ।  
मृतं वारितरं ग्राह्यं सर्वकार्यकरं परम् ॥

### Fourteenth process.

Purified and powdered iron, usharaka (saltpetre), and asvagandha, each one palam in weight—all of

these are to be rubbed together with the juice of kanya for one day, and made into a ball which is to be wrapped up with the leaves of eranda and coated all round with mud. This ball, when dried, is to be heated by gajaputam, leading to the reduction of the iron into red ashes, which will float upon the surface of water.

पञ्चदशोविधिः ।

अर्जुनस्य त्वचा पेष्या कांजिकेनातिलोडिता ।  
तन्मध्ये लौहचूर्णं च कांस्यपात्रे विनिच्छिपेत् ॥  
ततोऽयं धार्यते घर्मे द्रवैः पूर्यः पुनः पुनः ।  
अर्जुनस्यारणालैर्वा लौहमेवं विमारयेत् ॥

### Fifteenth process.

Bark of arjuna is to be rubbed with water, mixed with kanji and kept in a bell-metal pot. Purified and powdered iron is to be thrown into the afore-said liquid, and the pot containing the whole thing is to be exposed to the heat of the sun. Fresh juice of arjuna bark or aranala is to be poured into the pot over and over again, as soon as the iron is found to be dried. This leads to the incineration of iron.

षोडशोविधिः ।

दन्तीपत्रद्रवेन हि लौहचूर्णं विलोडियेत् ।  
दिनैकं धारयेद घर्मे द्रवं देयं पुनः पुनः ॥  
रुद्धौ । रात्रौ पुटे पचेदेभिर्द्रवैश्च भावयेत् ।  
एवमष्टदिनं कुर्यात् लौहस्य मृत्यवे खलु ॥

### Sixteenth process.

Purified and powdered iron is to be mixed with the juice of danti leaves, and exposed to the heat of the sun for one day, the juice being applied as many times as necessary for the moistening of the iron powder, whenever it is dried. The iron is then to be dried and subjected to heat at night by putam. It is then to be taken out of the putam, when cooled of itself, and again mixed with the juice, and exposed to the heat of the sun. This is to be done for eight days, leading to the incineration of the iron.

सप्तदशोविधिः ।

चिञ्चापत्रनिभं कुर्यात् त्रिविधं लौहपत्रकम् ।  
 मृतपात्रस्थं क्षिपेत् घर्मे दन्त्या द्रावैः प्रपूरितम् ॥  
 द्रावोऽयं दोयते तावत् यावज् जरति लौहकम् ।  
 म्रियते तीव्रघर्मेन चूर्णितं तन्नियोजयेत् ॥

### Seventeenth process.

Iron is to be made into leaves as thin and small as tamarind leaves. These are then to be kept immersed in the juice of danti, contained in an earthen vessel, which is to be exposed to the heat of the sun.

The heating is to be continued with fresh juice of danti applied, over and over again, till the incineration of iron, which is to be powdered very fine, when the process is completed.

अष्टादशोविधिः ।

कान्तं तीक्ष्णं तथा मुरांडं पत्रीकृतं विशेषयेत् ।  
 चूर्णितं भावयेत् तत् तु त्रिधा मत्स्याक्षजद्रवैः ॥  
 ततस्तद् भावयेद् यत्ताद् द्विदिनं चित्रकद्रवैः ।  
 त्रिकण्ठकद्रवैस्त्रयहं सहदेव्यास्तथैव च ॥  
 गोमूत्रैस्त्रिफलाक्षाथैः भावयेत् त्रयहं त्रयहम् ।  
 धातक्याश्च ततो मध्यं कमादुदेयं पुटं पुटम् ॥  
 रुद्धं गजपुटेनैवं मृतं योगेषु योजयेत् ॥

### Eighteenth process.

Powdered and purified iron is to be subjected to bhavana for three times with each of the following :— juice of kantakari, juice of trikantaka, cow's urine, decoction of triphala, and juice of dhataki. After each act of bhavana referred to above, the iron is to be rubbed and subjected to heat by Gajaputam. This will lead to the incineration of the iron.

उनष्टिं शोविधिः ।

द्रवैः कुरण्ठपत्रोत्थैलौहचूर्णं विमर्द्येत् ।  
 दिनैकमातपे तीव्रे तथा द्रवैस्त्रिकण्ठजैः ॥  
 वन्ध्याभृङ्गीपुनर्नवागोमूत्रैश्च दिनं दिनम् ।  
 गोमूत्रैस्त्रिफला काथ्या तत्कषायेन भावयेत् ॥

त्रिससाहं प्रयत्नेन दिनैकं मर्द्येत्ततः ।  
 रुद्ध् । गजपुटे पचेद्विनं काथेन मर्द्येत् ॥  
 दिवा मर्द्य पुटेह रात्रावेकविंशत्यहानि वै ।  
 एकविंशत्यहेनैव श्रियते त्रिविधं ह्ययः ॥

Nineteenth process.

Purified and powdered iron is to be rubbed in the intense heat of the sun for one day with each of the following :—juice of kuranta leaves, (b) juice of trikantaka, (c) juice of bandhya, (d) juice of bhringaraja (e) juice of punarnava, and (f) cow's urine. The iron is next to be subjected to bhavanas for twenty one days with the decoction prepared from triphala boiled with cow's urine. The iron is then to be subjected to Gajaputam for twenty one times at night, after having been rubbed each time during the day with the same liquid (*viz.* decoction of triphala and cow's urine). This is how iron is incinerated.

विंशतितमोविधिः ।

मान्त्रिकञ्च शिला हाम्लै हौरिद्रामरिचानि च ।  
 पिष्टा तस्मिन्नयः पत्रं तसं तसं निषंचयेत् ॥  
 ससधा त्रिफलाकाथे जलेन कालयेत् पुनः ।  
 कुट्टयेल्लौहृदरण्डेन पेषयेत् त्रिफलाजलैः ॥  
 अम्लेनालोडितं रुद्ध् । गजान्धकपुटे पचत् ।  
 निरुत्थं जायते भस्म कान्तं तीक्षणं च मुण्डकम् ॥  
 षोडशांशेन लौहस्य दातव्यं मान्त्रिकं शिला ॥

### Twentieth process.

Makshika, manas-shila, haridra (turmeric), and maricha are to be rubbed with a sour vegetable juice. Into this solution are to be immersed hot iron leaves previously purified. They are next to be immersed, red hot, into the decoction of triphala for seven times. They are then to be washed off in water, and reduced to powder by being hammered by an iron rod. The powder, thus obtained, is to be rubbed with decoction of triphala and a sour non-metallic juice, and then heated by Gajaputam in a blind crucible. This will result in the reduction of the iron into ashes, incapable of being restored to their original state. The makshika and manas-shila used in this case should be one-sixteenth part of the iron.

एकविंशोविधिः ।

तिन्दुफलस्य मज्जाभिर्लिप्त्वा लौहं खरातपे ।  
धारयेत् कांस्यपात्रस्थं दिनान्तं तत् पुटेनिशा ॥  
त्रिफलाकाथसंयुक्तं कुर्यादेवम् पुनः पुनः ।  
अनेन छ्रियते लौहमचिराद्धि न संशयः ॥

### Twenty first process.

Purified and powdered iron is to be smeared with the internal kernel of tindu fruits (previously rubbed with water and made into a paste), kept in a bell-metal pot, and subjected to the heat of the sun during the whole of the day time, and again subjected to heat by putam at night, having been pre-

viously rubbed with the decoction of triphala. This process of smearing and heating, as described above, is to be repeated over and over again, leading to the incineration of the iron.

द्राविंशोविधिः ।

स्थाल्यां वा लौहपात्रे वा लौहदर्व्या विलोडनैः ।  
 पाचयेत् त्रिफलाकाथे दिनैकं लौहचूर्णकम् ॥  
 तत् पिण्डं त्रिफलातोयैः पिष्टा रुद्धा पुटे पचेत् ।  
 षोडशाहानि कर्तव्या प्रक्रियैषा प्रयत्नतः ॥  
 ततः त्रिधा प्रकर्तव्यं स्थालीपाकम् पुटादनु ।  
 भृङ्गीद्रावे तालमूल्यां हस्तिकर्णस्य मूलके ॥  
 शतावर्या विदार्या श्रू मूलकाथे च त्रैफले ।  
 वर्णितं सर्वमेतद्धि कर्तव्यं पुनरेव च ॥  
 ततः पुनर्यातोयैर्दशमूलकषायकैः ।  
 वृहत्याश्च कषायैर्वा बीजपुरस्य तोयतः ॥  
 ब्रह्मबीजरसैः शिशू रसैर्गोपयसाऽपि च ।  
 प्रत्येकेन प्रपेण्याद्यौ पूर्ववत्ततपुटे पचेत् ॥  
 भावयेत्तु द्रवेनैव पुटान्ते याममात्रकम् ।  
 प्रत्येकेन क्रमादेव पिष्टा पुटैश्च पाचयेत् ।  
 अनेन मियते सम्यक् कान्तं तीक्षणश्च सुण्डकम् ॥

Twenty second process.

Purified and powdered iron is to be heated with

the decoction of triphala, kept in an iron pot, and turned constantly with an iron ladle till the whole thing turns into a lump, which is to be rubbed with the decoction of triphala and subjected to heat by putam. This process is to be performed for sixteen times. The iron is then to be subjected to heat by the *sthali paka* system (to be described in process No 26) with the following liquids :—juice of bhringaraja, juice of talamuli, juice of the root of hastikarnapalasha, juice of the root of shatavari, juice of the root of bidari, and decoction of triphala. Next, all these processes from beginning to end are to be again performed for the second time. The iron is then to be subjected to bhavana for three hours at a stretch with each of the under-mentioned liquids, respectively :—juice of punarnava, decoction of dashamula, decoction of brihati, juice of bijapura fruit, juice or decoction of palasha seeds, and cow's milk. It is then to be rubbed with the same juice, and subjected to heat by putam after each act of bhavana and rubbing. This results in the incineration of the iron.

### त्रयोविंशोविधिः ।

पत्रं लौहभवं सुतसमसकृत् काथे न्तिपेत् त्रैफले ।  
 चूर्णमूतमतो पचेत् त्रिफलजे काथेऽथवा गोजले ॥  
 मत्स्याक्षीत्रिफलारसेन पुटयेद्यावन्निरुत्थं भवेत् ।  
 पश्चात्त्वावितमद्युतं सुपुटितं सिद्धं भवेदायसम् ॥

### Twenty third process.

Iron sheets are to be burned red hot and

immersed in the decoction of triphala. They are then to be reduced to powder and boiled with a decoction of triphala or cow's urine. The iron is next to be rubbed with decoction of triphala or juice of matsyakshi, and subjected to heat by putam. The last process is to be repeated till the iron becomes incapable of being restored to its original condition. Thus incinerated, the iron gains in efficacy, if subjected to bhavana with the juices of suitable herbs, and again subjected to heat by putam after every act of bhavana.

चतुर्विंशोविधिः ।

परिप्लुतं दाढिमपत्रवारा लौहं रजः  
स्वल्पकठोरिकायाम् ।  
प्रियेत वस्त्रावृतमर्कभासा पुटेत्  
ततो वै त्रिफलादिवारा ॥

#### Twenty fourth process.

Purified and powdered metal is incinerated, if it is kept immersed in the juice of pomegranate leaves contained in a small earthen basin, and exposed to the heat of the sun, duly covered by means of a piece of cloth.

Purified iron, thus reduced, is to be rubbed with the juice or decoction of *triphaladi* and subjected to heat by putam. (For meaning of *triphaladi*, see page 48.)

पञ्चविंशोबिधिः ।

विशेषितमयश्चूर्णं गोमूत्रेन विमर्द्येत् ।  
शतशस्तत् पुटेद्वह्नौ मृतमेवं भवेद् ध्रुवम् ॥

### Twenty fifth process.

Purified and powdered iron is to be rubbed with cow's urine and subjected to putam. Performance of this process for hundred times results in the incineration of iron.

रसव्यतिरेकेन मासितलौहस्य पुटविधिः ।

शतादिस्तु सहस्रान्तः पुटो देयो रसायने ।  
दशादिस्तु शतान्तःस्यात् पुटो वै व्याधिनाशनः ॥  
वाजिकर्मणि विज्ञेयः पश्च पञ्च शताधिकः ।  
पुटाद्वोषविनाशःस्यात् पुटादेव गुणोदयः ॥  
ग्रियते च पुटाल्लोहं पुटांस्तस्मात् समाचरेत् ।  
यथा यथा प्रदीयन्ते पुटाः सुवह्वो यदि ॥  
तथा तथा विवर्जन्ते गुणाः शत सहस्रशः ॥  
धातूनां नीरसं भस्म पुटाधिक्येन शस्यते ।  
सरसस्य पुटाधिक्यं नैव हि गुणवृद्धये ॥

### *Utility of putam.*

For the purpose of incineration of iron, heating by putam for ten to hundred times may be considered necessary for the cure of diseases only. Putam

for hundred to one thousand times is necessary for the purpose of curing and preventing physical decay and senility. For the purpose of retention of semen, it is necessary to subject iron to putam for more than one thousand times.

Increase in the number of putam is calculated to increase the efficacy of a metal, incinerated without mercury. This is not the case with a metal incinerated by the help of mercury.

षड् विंशोविधि ।

भानुपाकात् तथा स्थालीपाकाच्च पुटपाकतः ।  
निरुत्थो जायते लौहो यथोक्तफलदो भवेत् ॥

### Twenty sixth process.

Iron is incinerated and becomes incapable of being restored to its former condition, if it is roasted by means of all the three different operations called (a) Bhanu-paka, (b) Sthali-paka, and Puta-paka, as described below.

भानुपाकविधिः ।

लौहदृशदि लौहच्च मूदूगरेण हतं मुहुः ।\*  
कृत्वाम्बुगलितं शुद्धं जलेन त्रैफलेन वा ॥  
कालयेद्वहुशः पश्चाद् द्रवाच्चैव विमोचयेत् ।  
शोषयेद् भानुभिः पुनर्भानुपाके प्रयोजयेत् ॥†

\* लौहदृशदि लौहस्तल्वे इत्यर्थः ।

† भानुभिः सूर्यरश्मिभिः ।

प्रदेयं भानुपाके तु लौहतुल्यं फलत्रिकम् ।  
 जलं द्विगुणितं दत्त्वा चतुर्भागंतु रक्षयेत् ॥  
 एवमुक्तफलकाथजलं दत्त्वा पुनः पुनः ।  
 शोषयेत् सूर्यंतेजोभिर्निरन्तरमहस्त्रयः ॥  
 अथवा तत्र तत् काथं दत्त्वा सप्तवारं भिषक् ।  
 शोषयेदर्करश्मभिः सप्तवारं प्रयत्नतः ॥

(a) *Bhanu-paka Process.*

Purified iron is to be reduced to powder by being kept in an iron mortar and hammered repeatedly. The powder is then to be mixed with a sufficient quantity of water or decoction of triphala, and thus washed off. It is then to be dried by being exposed to the sun, subjected to the process of heating called *bhanu-paka*. For the purpose of *bhanu-paka*, triphala, equal in quantity to the iron, is to be boiled with double its quantity of water which is to be reduced to one fourth its quantity. The iron is now to be saturated with the decoction referred to above, and dried by the sun. The process is to be performed continuously for three days or it may be performed for seven times.

अथ स्थालीपाकविधिः ।

इत्थमादित्यपाकान्ते स्थाल्यां पाकमुपाचरेत् ।  
 तत्र फलत्रिकं ग्राह्यमयस्त्रिगुणीकृतम् ॥

तस्य षोडशिकं तोयमष्टभागावशेषितम् ।  
 मृदुमध्यकठोराणामन्येषामयसा समम् ॥  
 कथनीयं समादाय चतुरष्टौ च षोडश ।  
 गुणानां स्थाप्यते तोयं शेषयेदयसा समम् ॥  
 स्वरसस्यापि लौहेन स्थालीपाके समानता ।  
 स्थाल्यां काथादिकं दत्त्वा यथाविधि विनिर्मितम् ।  
 पाकेन जीयते येन स्थालीपाकस्तदुच्यते ॥  
 हस्तिकर्णपलाशस्य मूलञ्च शतमूलिका ।  
 भृङ्गराजपितृश्रियपुनर्णवारसैः सह ॥  
 स्थाल्यां लौहं पचेद्धीरः काथात् तु त्रैफलादनु ।  
 यथादोषौषधेनापि स्थालीपाको विधीयते ॥

(b) *Sthali paka.*

Roasting of iron by sthali-paka is to be resorted to after bhanu-paka. For the purpose of sthali-paka, triphala, three times in weight of the iron, is to be boiled with water, sixteen times in weight of the former, to be reduced to one eighth of the water.

Decoctions of other things than triphala are to be prepared as follows :—The article from which a decoction is to be prepared is to be equal in weight to the iron. Such an article is to be boiled with water which is four, eight or sixteen times its weight, according as it is soft, hard, or very stiff, respectively. The quantity of the decoction, thus

prepared, should be equal to that of the iron. If the juice of a plant is to be used instead of a decoction, the quantity of such a juice should also be equal to that of the iron. Roasting by sthali-paka means heating of the iron by fire in an iron cauldron, in which the iron is boiled with some decoctions or juices of plants, till the decoction or juice is completely dried up. Such a roasting generally takes place, first of all, with decoction of triphala (to be prepared in a way described above), and then with the decoction or juice of the following :—hastikarna-palasha roots, satamuli, bhringa-raja, kesharaja, and punarnava. For the purpose of sthali-paka, juices or decoctions of other herbs also may be made use of, if called upon by the nature of the disease for the treatment of which the iron is meant to be prepared.

### अथ पुटपाकविधिः ।

स्थालोपाके सुसंपकं प्रक्षाल्य स्वच्छवारिणा ।  
 शुष्कं संचूर्ण्य यत्नेन पुटपाके प्रयोजयेत् ॥  
 पुटादोषविनाशः स्यात् पुटादेव गुणोदयः ।  
 म्रियते च पुटाज्ञोहस्तस्मात् पुटं समाच्चरेत् ॥  
 यथा यथा प्रदीयन्ते पुटा सुबहुशो यदि ।  
 तथा तथा प्रकुञ्बन्ति गुणानेव सहस्रशः ॥  
 पुटपाकेन पकं तु शस्यते रसकर्मसु ।  
 दशादिशतपथ्यन्तो गदे पुटो विधिर्मतः ।  
 शतादिस्तु सहस्रान्तः पुटो देयो रसायने ॥

वाजिकर्मणि विज्ञेयो दशादिः शतपञ्चकः ।  
 तावदेव पुटेष्ठोहं यावच्छूर्णीकृतं जले ॥  
 निस्तरङ्गे लघुत्वेन समुत्तरति हंसवत् ।  
 पुटपाकौषधस्यापि काथो वा स्वरसोऽपि वा ॥  
 वद्यमानप्रमाणेन कर्तव्यो भिषजां वरैः ।  
 सर्वेषां स्वरसाभावे काथो ग्राह्यो मनीषिभिः ।  
 अभावे स्वरसस्यापि काथ एव फलत्रिकात् ॥

(c) *Puta-paka.*

The iron, properly roasted by sthali-paka process, should be washed with clear water, then dried, powdered, and again roasted by puta-paka. Roasting by putam serves to remove the natural blemishes and to increase the properties of iron and other metals. Such a roasting causes the incineration of iron which gains in efficacy in proportion to the number of putam resorted to. Metals, properly incinerated by means of putam, should be used in mercurial operations. If it is meant to cure diseases only, iron, incinerated by 10 to 100 putams, may be made use of. Putams from 100 to 1000 are to be resorted to, if it is meant to prevent and cure senile decay. Putams from 10 to 500 are necessary, if it is meant to use the metal as an aphrodisiac. Putams, in case of a metal, are to be resorted to so long as it does not float upon calm water. For the purpose of puta-paka, the juice or decoction, whichever is

available, of the herbs named below should be made use of :—

अथ त्रिफलादिगणः ।

त्रिफला त्रिवृता दन्ती कटुकी तालमूलिका ।  
 वृद्धदारकवृश्चीरवृषपत्रकचित्रकाः ॥  
 शृङ्खचेरविडङ्गौच भृङ्खभल्लातकौषधम् ।  
 दाढ़िमस्य च पत्रानि शतपुत्री पुनर्णवा ॥  
 कुठारक्रामकौ कन्दः तन्त्री भेकस्य पर्णिका ।  
 हस्तिकण्ठपलाशश्च कुलिशः केशराजकः ॥  
 मानः खण्डितकर्णश्च गोजिहा लौहमारकाः ।  
 गिरिशैयोगिभिः प्रोक्तस्त्रिफलादिरयं गणः ॥  
 सामान्यपुटपाकार्थमेतानोच्छन्ति सूरयः ।  
 विशेषपुटपाकाय गणानन्यान् शृणूदितान् ॥

अथ परलङ्घादिगणः ।

एरण्डः शारिवा द्राक्षा शिरीषश्च प्रसारणी ।  
 माषमुद्धाल्यपर्णिनौ विदारीकन्दकेतकी ।  
 एरण्डादिगणो ह्येष सर्ववातविकारनुत् ॥

अथ किरातादिगणः ।

किरातमसृता निष्वः कुस्तुम्बुरु शतावरी ।  
 पटोलंचन्दनं पद्मं शाल्मल्युदुम्बरी जटा ।  
 पैत्तिकामयहन्ताऽयं किरातादिगणोमतः ॥

अथ शृङ्खलेरादिगणः ।

शृङ्खलेरस्य मूलानि निर्गुणडी कौटजं फलम् ।  
करञ्जद्वितयं मूर्वा शोभाञनशिरीषकौ ॥  
वरुणश्चार्कपणं च पटोलं करटकारिका ।  
शृङ्खलेरादिको ह्येष गणः श्लेष्मगदापहः ॥

अथ गोक्षुरादिगणः ।

गोक्षुरक्षुरकौ व्याघ्री सिंहपुच्छीद्वयं स्थिरा ।  
गोक्षुरादिरिति प्रोक्तो वातश्लेष्महरोगणः ॥

अथ पटोलादिगणः ।

पटोलपत्रकोशीरकासमर्द्दपराजिताः ।  
लोध्रे न्दीवरकहलारवराही कान्तया सह ।  
पटोलादिरिति ज्ञेयः पित्तश्लेष्मगदापहः ॥

अथ किंशुकादिगणः ।

किंशुकः काश्मरी विश्वमभिमन्थस्त्रिकरटकः ।  
श्योनाकं सप्तपणी च सिंहपुच्छीद्वयं स्थिरा ॥  
पाटला करटकारी च बृहती बिल्वमेव च ।  
किंशुकादिगणो ह्येष दोषत्रयहरोमतः ॥

अथ शतावर्यादिगणः ।

शतावरी बला धात्री गुडूची वृद्धदारकः ।  
वानरीभृङ्खलाजाख्यविदारीगोक्षुरक्षुराः ।  
वाजिगन्धा कणा चैव वाजिकर्मसु शस्यते ॥

अथ विदार्यादिगणः ।

विदारीकन्दपिण्डाह्बभृङ्गराजशतावरी ।  
क्षीरिकंचुकभल्लातामृतकाचित्रकास्तथा ॥  
करिकर्णपलाशश्च मुषलोमधुकावपि ।  
मुण्डरीकेशराजौच शस्ता एते रसायने ॥

अथ पुटपाके उपदेशः ।

सामान्ये च विशेषे च पुटे यद्यत् प्रकीर्तिम् ।  
मिलितैरेकशो वा तैर्यथेष्टं पुटयेत् ततः ।  
षुटपाके फलादीनामयसा ग्रहणं समम् ॥

### *Triphaladi gana.*

They are as follows :—triphalala, trivit, danti, katuki, tala-muli, briddha-dara, brischira, basaka, chitraka, ardraka, biranga, bhringa-raja, bhallataka, shunthi, darima leaves, shatamuli, punarnava, kuthar-chhinna, mustaka, suranam, guduchi, vekaparni, hasti-karna-palasha, asthi-sanhara, kesha-raja, mana, khandita-karna (kharakona), and go-jihva. These are incinerators of iron. They are generally used in the process of heating of iron by putam.

### *Erandadi-gana.*

They are as follows :—eranda, shariba, draksha, shirisha, prasarani, mashaparni, mudgaparni, bidari-kanda, and ketaki. They serve to pacify all the diseases due to an abnormal excess of air. Iron, rubbed with the juice or decoction of these drugs,

and heated by putam, is therefore efficacious in diseases due to an excess of vayu.

*Kiratadi-gana.*

They are as follows :—kirata, guduchi, nimba bark, green dhanya, shatavari, patala, chandana, padma, shalmali, udumbara, and jata-manshi. They serve to pacify all the diseases due to an abnormal excess of pittam. They should therefore be specially used in the process of incineration of iron by heating by putam, if it is meant to use such iron in diseases due to excess of pittam.

*Shringaberadi gana.*

They are as follows :—ardraka, nirgundi, indra-java, karanja, visha-karanja, murba, shobhanjana, shirisha, baruna, arka leaves, patala, and kantakari. They serve to cure diseases due to an excess of kapha. They should therefore be used in the process of incineration of iron by heating by putam, if it is meant to use such iron in diseases due to an excess of kapha.

*Gokshuradi gana.*

They are as follows :—gokshura, kokilaksha, kantakari, shala-parni, and prishni-parni. They serve to pacify an abnormal excess of vayu and kapha. They are therefore to be specially used in processes of incineration of iron by heating by putam, if it is meant to use such iron in diseases due to an excess of vayu and kapha.

*Pataladi-gana.*

They are as follows :—patala leaves, ushira,

kasha-mards, aparajita, lodhra, nilotpala, kalhara, (white utpala), barahi-kanda, and priyangu. They serve to pacify diseases due to an excess of pittam and kapha. Iron meant to cure such diseases should be rubbed with the juice or decoction of these drugs before it is heated by putam.

### *Kinshukadi-gana.*

They are as follows :—palasha, gambhari bark, shunthi, agnimantha, trikantaka, shyona, saptaparni, shala-parni, prishni-parni, shalmali, patala, kantakari, brihati, and bilva. They serve to pacify diseases due to an abnormal excess of the three doshas (i.e. vayu, pittam, and kapha). Iron meant to cure such diseases should be rubbed with the juice or decoction of these drugs and then heated by putam.

### *Shatabarjadi gana.*

They are as follows :—shatabari, bala, amalaki, guduchi, briddha-daraka, banari, bhringa-raja, kesha-raja, bidari, gokshura, kokilaksha, ashva-gandha, and pippali. They are aphrodisiac. Iron meant to be of this description should be incinerated with these drugs.

### *Bidarjadi gana.*

They are as follows :—bidari-kanda, tagara, bhringa-raja, shatabari, kshirika, kanchuka, bhallataka, guduchi, chitraka, hasti-karna-palasha, mushali, jasti-madhu (or mahua plant), mundiri, and kesharaja. These are curer and preventer of senile decay. Iron meant to be of this description should be rub-

bed with the juice or decoction of these drugs, before it is heated by putam.

N. B. Iron should be rubbed, before being heated by putam, with all or any one of the groups of drugs referred to above, according to the necessity of the case. Such a rubbing, followed by an act of heating by putam, may be repeated as many times as desired. For the purpose of each act of such a rubbing, the quantity of the juice or decoction of the group of drugs referred to above should be equal to that of the iron.

प्रयोजनवशात् पुटपाके प्रयोज्या वनस्पतयः ।

वारिशिष्ठु पलाशेभकर्णभृङ्गद्रवाम्भसा ।  
 अत्रोत्तरे पुनर्द्याङ्गूयसखिफलापुटान् ॥  
 तदानाद्वद्धकोष्टस्य लौहं वातानुलोम्यकृत् ।  
 स्मृतं पिप्पलितोयेन मन्दाद्देरमिवद्धये ॥  
 विदारीवारिणा कूँव्येऽरुचौ जम्बीरवारिणा ।  
 शिरीषतोयैर्वर्वर्णं वाते वात्यालकाम्भसा ॥  
 पित्ते पर्पटतोयेन मरिचाद्राम्बुना कफे ।  
 दशमूलीकषायेन सन्निपातोद्धवे गदे ॥  
 किराततिक्ततोयेन ज्वरेषु विषमेषु च ।  
 गुरुचीवारिणा मेहेऽतिसारे कुटजाम्भसा ॥  
 ब्रह्मयष्ट्यम्भसा श्वासे कासे वासकवारिणा ।  
 काकोदुम्बरिकातोयै रक्तपित्तप्रशान्तये ॥

पाराङुत्वे महिषीमूत्रैः कृमौ जन्तुम्भतगड्लैः ।  
 कुष्टे विड्ग्नभल्वातैः प्रीहि रोहितकाम्भसा ॥  
 सिन्दुवारद्रवैर्मूत्राघाते शूले तुषोदकैः ।  
 पामादद्रुविचर्चीषु दद्याद्द्रुम्बवारिणा ॥  
 मुशलीवारिणार्शः सु हृद्रोगेऽर्जुनवारिणा ।  
 आमवातप्रशान्त्यर्थमुच्चटामूलजैद्रवैः ॥  
 सोमराजीजलैः कुष्टे तथा हि खदिरोदकैः ।  
 शिलोद्धदाम्बुनाऽश्मर्यामुदावर्त्ते त्रिवृज्जलैः ॥  
 गुल्मेऽम्लदाढिमाम्भोभि ब्राह्मीतोयैः स्वरक्षये ।  
 वाजिगन्धाजटातोयै राजयद्मनिवृत्तये ॥

*Putam with special drugs for the treatment of special diseases.*

Iron is to be subjected to heat by putam after having been rubbed with the following drugs, if it is meant to cure constipation:—triphalas, sigru, hastikarna-palasha, bhringa-raja, and again triphala. Similarly, iron is to be rubbed with decoction of pippali for the purpose of curing indigestion. Juice of bidari is to be used for the treatment of impotency. Lime juice is to be made use of, for the treatment of loss of appetite. Decoction of shirisha is to be thus used for the removal of loss of complexion. Juice of bala is to be used for the treatment of rheumatism, paralysis, and other diseases due to excess of vayu. Juice of parpata is to be used for

diseases due to pittam. Decoction of dashamula for diseases due to an abnormal excess of the three doshas. Juice of kirata-tikta is to be used in bisama-jvaram (malaria, kalazar, etc.). Decoction of guduchi in spermatorrhoea. Juice of kutaja in diarrhoea. Juice of bhargi in asthma. Juice of bashaka in cough. Juice of kakodumbura in racta-pitta. Urine of she-buffalo is to be used in anemia. Decoction of biranga and rice in worms. Decoction of biranga and bhallataka in leprosy. Decoction of rohitaka in spleen. Juice of sindu-barā in gleet and stricture. Kanji in colic. Juice of dadrumari in itches and ringworm. Juice of mushali in piles. Juice of arjuna in heart disease. Juice of uchata roots in rheumatism. Decoction of somaraji and khadira wood in leprosy. Juice of shilodbheda in stone disease. Juice of tribrit in udabarata or intestinal obstruction. Juice of sour pomegranate in gulma. Juice of brahma in hoarseness of voice. Juice of ashva-gandha and jata-mangsi in phthisis.

पुनः स्थालीपाकविधिः ।

अथ कृत्वा योभारणे दत्त्वा त्रिफलाद्यशेषमन्यद्वा ।  
 प्रथमं स्थालीपाकं कुर्यादेतत् चयात्तदनु ॥  
 गजकर्णच्छदमूलशतावरीभृङ्केशराजरसैः ।  
 प्राग्वत् स्थालीपाकं कुर्यात् प्रत्येकमेकं वा ॥

(d) *Sthalipaka for the second time.*

The iron reduced in the above manner is to be

boiled with triphaladi, etc. (see page 47) in an iron pot. When dried, it is again to be boiled with some or all of the following juices :—hasti-karna-palsha roots, satabari roots, bhringa-raja, and kesha-raja.

### सप्तविंशोषिधि ।

कान्तादिलौहमारणविधानसर्वस्य उच्यते तावत् ।  
 यस्य कृते तल्लौहं पक्षव्यं तस्य शुभदिवसे ॥  
 समृद्धशरकरालोन्नतभूभागे शिवं समभ्यच्ये ।  
 वैदिकविधिना वहिं निधाय दत्त्वाहुतीस्ततः ॥  
 शक्त्यनुरूपं दद्याद् द्विजाय सन्तोषिने गुणिने ॥  
 सन्तोष्य कर्मकारं प्रसादपूगादिदानसम्मानैः ।  
 आदौ तदश्मसारं निर्मलमेकान्ततः कुर्यात् ॥  
 तदनु कुठारच्छन्नत्रिफलागिरिकर्णिकास्थिसंहारैः ।  
 करिकर्णच्छदमूलशतावरीकेशराजरसैः ॥  
 शालिच्छमूलकाशीमूलप्रावृजभृद्धराजैः ।  
 लिप्त्वा दग्धव्यं तदृष्टिक्रियलोहकारेण ॥  
 चिरजलभावितनिर्मलशालाङ्गारेण परित आच्छाय ।  
 कुशलाध्मापितभृतानवरतमुक्तेन पवनेन ॥  
 मृच्छवलसलिलभाज्जि किञ्च स्वच्छाम्बुसंप्लुतानि ॥  
 द्रव्यान्तरसंयोगादुवा स्वां शक्तिं भेषजानि मुञ्चन्ति ।  
 मलधलिमत् सर्वं सर्वत्र विवर्जयेत् तस्मात् ॥

संदंशेन गृहीत्वान्तः प्रज्वलितामिमध्यादपनीय ।  
 गलति यथायथमग्रे तथैव दग्धं रक्षयेन्निपुणः ॥  
 तलनिहितमूर्छं मुखांकुशलभं त्रिफलाजले  
 विनिःक्षिपेत् ।  
 निर्वापयेदशेषं शेषं त्रिफलाम्बु रक्षेच्च ॥  
 यस्त्रौहं न मृतं तत् पुनरपि पक्तब्यमुक्तमार्गेण ।  
 न मृतं तथापि यत् तन् न पक्तब्यमलौहमेव हि तत् ॥  
 तदनु घनलौहपात्रे कालायसमुदगरेण संचूर्ण्य ।  
 दत्ता बहुशः सलिलं प्रक्षालयाङ्गारमुद्भृत्य ॥  
 तदयः केवलममौ शुष्कीकृत्वातपेऽथवा पश्चात् ।  
 लौहशिलायां पिंड्यादसितेऽशमनि वा तद्ब्राह्मणौ ॥

## Twenty seventh process.

Shiva is to be worshipped on a piece of land, duly cleansed, on a day considered auspicious for the man for whom the iron is meant to be prepared (an auspicious day is to be ascertained having regard to the configuration of the planets for the time being, with special reference to the position of the moon at the time of birth). The worship is to be conducted and a sacrificial fire is to be kindled in accordance with the rites prescribed in the Vedas. Presents may also be given to the Brahmanas, chemists, and the smiths according to ability. First of all, the iron is to be purified very carefully. It is to be coated with a paste made of

the following herbs, covered by means of charcoal prepared from shala wood (previously cleansed by being washed off in clear water), and heated by means of a bellows :—kuthara-chinna, triphala, girikarnika (black aparajita), asthi-sanhara, hasti-karna-palasha-roots, shatavari, kesha-raja, shalincha-roots, mulaka, and bhringa-raja. The iron, thus heated, is to be immersed into decoction of triphala only, when the coating is completely burnt out. It is then to be washed off, dried, and duly powdered. The process is to be repeated over and over again until the iron is reduced to ashes. The metal which is not incinerated by the above process is not iron at all. In performing the process, care should be taken to see that dust, mud, and other impurities do not find their way into the iron at any stage of its incineration, in as much as herbs and other medicinal ingredients lose their property coming in contact with foreign matters.

अथ पुटपाकप्रकारः ।

लौहादि पुटनीयं हि रवितापसुशोधितम् ।  
 संरुध्य मृतशरावाभ्यां सन्धिलेपं समाचरेत् ॥  
 सपंकवस्त्रखण्डेन तथा कर्दमयोगतः ।  
 शरावसंपुटं तच्छि संपुटं च पुटं तथा ॥  
 पाचनं पुटयन्त्रेन पुटपाको विकथ्यते ।  
 हस्तमात्रमिते गर्त्ते करीषेनाढ्ढूरिते ॥

अथवा तुषकाषाभ्यां शरावसंपुटं चिपेत् ।  
 अग्निं निधापयेत् तत्र ततो गत्तं प्रपूरयेत् ॥  
 दिवा वा यदि वा रात्रौ विधिनानेन पाचयेत् ।  
 चतुर्भिः प्रहरैरेव पुटपाकेन मारयेत् ॥  
 कुकुटपुटसंज्ञोऽयं पुटपाको विकथ्यते ॥  
 पुटपाके कणादूङ्घूँ स्थितो भवति भस्मसात् ॥  
 अधस्तादपकृष्टस्तु मन्दो भवति वीर्यतः ।  
 कुरडस्थो भस्मनाच्छन्न आकृष्टव्यः सुशीतलः ।  
 समाकृष्टस्य तस्य गुणहानिः प्रजायते ॥

*How to heat a thing by putam.*

The material which is meant to be heated by putam is to be dried up by sun's rays, and put upon an earthen basin, covered by another basin of the same kind, the joint being closed by means of mud and rags. The basins, thus joined, are called putam, sampatam or sharaba-sampatam. Heating of materials, confined in this apparatus, is called puta-paka.\*

Fill up one half of a cubical pit, one cubit in dimensions, with cowdung cakes or wood and husks, set fire to it, and place the sampatam containing iron, etc, upon the heap. Fill up the remaining half of the pit with cowdung cakes, etc. Such a

\* प्रथम खण्डे २६३—२६६ पृष्ठाः द्रष्टव्याः ।

\* See page 293 and 296, Vol. I.

fire is to be kept burning for 12 hours continuously. When cooled of itself, the samputam is to be taken out, and the iron, etc, to be obtained, breaking open the samputam. Heating in this way is known by the name of kukkantha putam (see page 296, Vol. 1) Heated in this way, even a little longer than the prescribed time of 12 hours at a time, the contents of the iron becomes incinerated ; but they lose in quality, if they are heated for a shorter than the time prescribed.

अष्टाविंशोविधिः ।

ज्येष्ठमेतत् स्वतन्त्राऽयःपाकं न पलपञ्चकादर्वाक् ।  
 सुबहुप्रयासदोषादूच्छृँ पलत्रयोदशकात् ॥  
 तत्रायसि पचनीये पञ्चपलादौ त्रयोदशपलान्ते ।  
 लौहात् त्रिगुणा त्रिफला ग्राह्या षड्भिः पलैरधिका ॥  
 मर्द्दनपुटनस्थालीपाकात्रिफलैकभागसम्पाद्याः ।  
 त्रिफलाभागद्वितयं ग्रहणोयम् लौहपाकार्थम् ॥  
 सर्वत्रायःपुटनस्थालीपाककार्ये जलं संख्यातम् ।  
 त्रिफलप्रतिपलं तद्द द्विगुणं वाऽथ काथार्थमादेयम् ॥  
 तत्राष्टमांशेन शेषः काथस्य यत्ततः स्थाप्यः ।  
 तेन हि मर्द्दनपुटनस्थालीपाका भविष्यन्ति ॥  
 पाकार्थे तु त्रिफलाभागद्वितयं शरावसंख्यातम् ।  
 प्रतिपलमस्तुसमं स्यादधिकं द्वाभ्यां शरावाभ्याम् ॥

तत्र चतुर्थीभागः शेषो निपुणैः प्रयत्नतो ग्राह्यः ।  
 अयसः पाकार्थत्वात् स हि सर्वस्मात् प्रधानतमः ॥  
 पाकार्थमश्मसारे पञ्चपलादौ त्रयोदशपलान्ते ।  
 दुग्धशरावद्वितयं पादैरेकाधिकैरधिकम् ॥  
 पञ्चपलादेमात्रा तदभावे तदनुसारतो ग्राह्यम् ।  
 चतुरादिकमेकान्तं शक्तावधिकं त्रयोदशादिकात् ॥  
 त्रिफलात्रिकटुचित्रककान्तकामकविङ्गानाम् ।  
 जातीफलजातीकोषैलाककोललवङ्गानाम् ॥  
 सितकृष्णजीरयोरपि चूर्णान्ययसा समानानि स्युः ।  
 त्रिफलात्रिकटुविङ्गा नियता अन्ये यथाप्रकृति ॥  
 कालायसदोषकृते जातीफलादेलवङ्गकान्तस्य ।  
 चेपः प्राप्त्यनुरूपः सर्वस्योनस्य चैकाद्यैः ॥  
 कान्तकामकमेकं निःशेषं दोषमपहरत्ययसः ।  
 द्विगुणत्रिगुणचतुर्गुणमाज्यं ग्राह्यं यथाप्रकृति ॥  
 यदि भेषजभूयस्त्वं स्तोकत्वं वा तथापि चूर्णणाम् ।  
 अयसा साम्यं संख्याभूयोऽल्पत्वेन भूयोऽल्पे ॥  
 एवं धात्वनुसारात् तत्तत् कथितौषधस्य बाधेन । \*  
 सर्वत्रैव विधेयस्तदकथितस्यौषधस्योहः ॥

### Twenty Eighth process.

For the purpose of incineration, the minimum

\* बाधेन वर्जनेनेत्तर्थः ।

and maximum quantities of iron should be 5 and 13 palas, respectively. In other words, iron less than 5 palas and more than 13 palas in quantity is unfit for incineration. For the purpose of such incineration, triphala, three times in weight of the iron, plus 6 palas is to be made use of. One third of this triphala is to be used for the purpose of rubbing, heating by putam and by sthalipaka process. For the purpose of the final act of roasting, the remaining two thirds of triphala is to be used. For the purpose of rubbing and heating by putam of iron, the quantity of water to be used for the preparation of decoction of triphala should be sixteen or thirty two times that of the triphala. If the quantity of iron varies from seven palas to 13 palas, the quantity of water to be used in preparing decoction should be as stated above, plus an additional quantity of 3 to 11 sarabas on the whole. The quantity of water thus used is to be reduced, by boiling, to one eighth of its original quantity. The decoction, thus prepared, should be used in rubbing and heating by putam and then boiling the iron by the sthali-paka process.

Next is the process of final roasting. For this purpose, the parts of triphala, as referred to above, should be boiled with water, eight times in weight, plus an additional quantity of two sarabas added to the whole. The water thus boiled with triphala should be reduced to one fourth its original weight. The decoction so prepared is the most important factor in the process of final roasting

of the iron. If kanta iron or load stone is to be reduced to ashes, milk, one and one fourth prasthas in weight, should be added to the decoction at the time of the final roasting. Kanta iron or load stone may be incinerated, even if it is less than five palas in weight. As a matter of fact, the less the weight of the kanta iron to be incinerated, the greater is its efficacy. The milk referred to above is prescribed for the preparation of kanta lauha, 5 to 13 palas in weight. If the quantity of the kanta iron is less than 5 palas, the quantity of the milk to be used should be reduced accordingly. At the time of the final roasting of all sorts of iron, including load stone, powder of the following herbs, equal in quantity to the iron, is to be mixed with the iron undergoing roasting:—triphala, trikatu, chitraka roots, nagarmustaka, bidanga, jatiphala, jatipatra, ela, kakkola, lavanga, white jira, and black-jira. Of these, triphala, trikatu, and bidanga are to be used in all cases, whereas they are to be chosen from, having regard to the constitution of the patient for whom the preparation is meant. For the purpose of removing the faults of black iron (**कालायसः**), all the herbs from jatiphala to lavnga are to be given so far as they can be procured. In the event of the one being incapable of being procured, that which precedes it in the above list should be used as a substitute. Of all the herbs named above, only nagara mustaka is sufficient for removing the faults of any iron. In all cases of final roasting, clarified butter to the extent of 2 to

4 times in weight of the iron (to be decided upon in reference to the constitution of the patient) is to be applied at the final roasting. Herbs, not included in the list, may also be made use of, if considered necessary, exactly as one or more of those included in the list may be rejected, if called upon by the nature of the case.

**ऊनत्रिशोविधि: ।**

लौहचूर्णं पलद्वन्द्वं गुडगन्धो समांशकौ ।  
खल्वे विमर्यं नितरां पुटेद्विंशतिवारकम् ॥  
पेषणं तु प्रकर्तव्यं पुटः पश्चात्प्रदीयते ।  
अनेन विधिना सम्यग्भस्मीभवति निश्चितम् ॥  
सर्वरोगान् निहन्त्येव नात्र कार्या विचारणा ।  
श्वेतपुनर्णेवापत्रतोयेन दशसंख्यकाः ।  
पुटास्ततः प्रदेयाश्च सिन्दूराभं प्रजायते ॥

**Twenty ninth process.**

Two palas of purified and powdered iron and the same quantity of each of gandhaka and gurh (molases) are to be rubbed together and heated by putam. This process is to be performed for twenty times leading to the incineration of the iron, which should then be rubbed with the juice of white punarnava for ten times, and subjected to heat each time it is so rubbed. The product will be ashes as red as vermillion.

त्रिंशोविधिः ।

दाढ़िमस्य दलं पिष्टा तच्चतुर्गुणवारिणा ।  
तदूरसेनायसं चूर्णं प्रावयेत् तु सुशोधितम् ॥  
आतपे शीधयेत् तत्त्वं पुटेदेवं पुनः पुनः ।  
एकविंशतिवारं स्तन् भ्रियते नात्र संशयः ॥

**Thirtieth process.**

Powdered and purified iron is to be saturated with the juice of pomegranate leaves pestled with four times their weight of water. When dried by the sun, they are to be subjected to heat by putam. Performance of the process for two times results in the incineration of the iron.

एकत्रिंशोविधिः ।

शिलागन्धार्कदुग्धाक्ताः स्वर्णाद्याः सर्वधातवः ।  
भ्रियन्ते द्वादशपुटैः सत्यं गुरुवचो यथा ॥

**Thirty first process.**

All the metals including gold are incinerated by being subjected to heat for twelve times, after having been rubbed with manas-shila, gandhaka and milk of arka plant.

द्वात्रिंशोविधिः ।

अथ मारणकर्मर्थे कथ्यन्ते भेषजानि च ।  
तत्र गणिडनिका मुख्या कच्चित् प्रोक्ता महौषधिः ॥  
कच्चित् सा सालहच्चीति हरितपर्णीति सा कच्चित् ।  
दिव्योषधीति सा कापि कच्चिन्मर्तकलम्बुका ॥

अन्यत्समानं चांगेर्या: कुठारछिन्नसंज्ञकम् ।  
 विकङ्गतं तृतीयं च चतुर्थं रक्तमारिषः ॥  
 पञ्चमं त्वचकं प्रोक्तं पष्ठमुक्तं मनःशिला ।  
 हिङ्गुलं सप्तमं प्रोक्तमष्टमं स्वर्णमाचिकम् ॥  
 मिलितान्येतानि हन्युः पित्तं कफमसृग्दरम् ।  
 विविधां पाण्डुतां कण्डु वहिमान्यं विवर्णताम् ॥

### Thirty second process.

The following are some of the drugs having the property of killing iron :—shalincha, kutharachhinna, bikankata, racta marisha, twachakam, manashila, hingula, and swarna makshika. All of these combined have the property of curing pittam, kapha, menorrhagia, anemia, itches, loss of appetite, and loss of complexion. (Iron may be rubbed with all these drugs and heated by putam in the usual way).

पारदविहीनलैहभस्मनो दोषापनयनम् ।  
 लौहस्य नीरसं भस्म कन्यानीरेण मर्दयेत् ।  
 तृतीयांशरसेनैव गन्धेन द्विगुनेन च ॥  
 एवं यामद्रयं कुर्यात् ततो देयो पुटो लघुः ।  
 स्वाद्वशीतं ममुद्धार्यं सिद्धं भस्म सुधासमम् ॥

### *Removal of defects of iron incinerated without mercury.*

Iron incinerated without mercury is to be rubbed with one third its weight of mercury, and sulphur,

double the quantity of mercury, for six hours with the juice of kanya. It is then to be heated by *Laghuputam*, before it is used as a drug.

त्रयोऽस्मि शोविधिः ।

( शुक्लौहम् । )

प्रणम्य शंकरं रुद्रं दगडपाणिं महेश्वरम् ।  
जीवितारोग्यमन्विच्छन्नादिमः पृच्छते गुरुम् ॥  
शुक्राचार्यं द्विजश्रेष्ठं रसज्ञमौलिभूषणम् ।  
सुखोपायेन हे नाथ शास्त्रकाराग्निभिर्विना ।  
दुर्बलानां च भीरूणां चिकित्सां वक्तुमर्हसि ॥  
तच्छिष्यवचनं श्रुत्वा लोकानां हितकाम्यया ।  
अर्शसां नाशनं श्रेष्ठं भैषज्यमिदमीरितम् ॥  
पाणिडवज्ञादिलौहानामादायान्यतमं शुभम् ।  
कृत्वा निर्मलमादौ च कुनञ्च माच्चिकेण वा ॥  
पन्त्रूरमूलकलकेन खरसेन दहेत् ततः ।  
वहौ निर्दिष्य विधिवत् शालांगारेण निर्धमेत् ॥  
ज्वाला च तस्य बोद्धव्या त्रिफलाया रसेन च ।  
ततो विज्ञाय गलितं शंकुनोद्धृं समुत्तिष्ठेत् ॥  
त्रिफलाया रसे पूते तदाकृष्य तु निर्विपेत् ।  
न सम्यग् गलितं यत् तु तदेव विधिना पुनः ।  
धातं निर्वापयेत् तस्मिन् लौहं तत् त्रिफलारसे ॥

ततः संशोष्य विधिवत् चूर्णयेल् लौहभाजने ।  
 लौहेन च तथा पिंच्याद् दृशदि शुक्रणचूर्णितम् ॥  
 धृत्वा लौहमये पात्रे माद्ये वा लिप्सरन्ध्रके ।  
 रसैः पंकसमं कृत्वा पचेत् तदुगोमयामिना ॥  
 पुटानि क्रमशो दद्यात् पृथगेषां विधानतः ।  
 त्रिफलाद्र्दकभृंगानां केशराजस्य बुद्धिमान् ॥  
 कन्दमानकभल्लातवहीनां शुरणस्य च ।  
 हस्तिकर्णपलाशस्य कुलिशस्य तथैव च ॥०  
 पुटे पुटे चूर्णयित्वा लौहात् षोडशिकं पलम् ।+  
 तन्मानं त्रिफलायाश्च पलेनाधिकमाहरेत् ॥  
 अष्टभागावशिष्टे तु रसे तस्याः पचेद्बुधः ।  
 अष्टौ पलानि दत्त्वा तु सर्पिषो लौहभाजने ।  
 तावेव लौहदब्यां तु चालयेत् विधिपूर्वकम् ॥  
 ततः पाकविधानज्ञः स्वच्छे चोर्जे च सर्पिषि ।  
 मृदुमध्यादिभेदेन घट्टीयात् पाकमाज्यतः ॥  
 आरभेत विधानेन कृतकौतुकमङ्गलः ।  
 धृतत्रामरसंथुकं लिहेदारक्तिकक्रमात् ॥

\* कुलिशः खण्डकर्णः काणिंडा इति भाषा ।

+ अन्यत्र त्रयोदशपलादूर्द्धं लौहं न पाच्यम् ।

वर्द्धमानानुपानं च गव्यं क्षीरोत्तमं मतम् ।  
 गव्याभावेऽप्यजायाश्च स्त्रिघ्वृष्यादिभोजनम् ॥  
 सद्योवहिकरं चैव भस्मकं च नियच्छति ।  
 हन्ति वातं तथा पित्तं कुष्ठानि विषमज्वरम् ॥  
 गुल्मान्तिपाण्डुरोगांश्च निद्रालस्यमरोचकम् ।  
 शूलं सपरिणामं च प्रमेहं चाववाहकम् ॥  
 श्वयथुं रक्तस्त्रावं च दुर्णामं च विशेषतः ।  
 बलदं बृंहणं चैव कान्तिदं स्वरवर्द्धनम् ॥  
 लाघवं च मनोज्ञं च नैरोग्यपुष्टिवर्द्धनम् ।  
 आयुष्यं श्रीकरं चैव वयस्त्तोजस्करं तथा ॥  
 सख्तीके पुत्रजननं बलीपलितनाशनम् ।  
 दुर्णामारिरयं चाशु दृष्टो वारसहस्रशः ।  
 निर्मूलं दद्यते शोषं यथा तूलमिवाग्निना ॥

### Thity third process.

The sage, Shukra, who was a very great chemist, gave the following recipe to his disciple, Adima, for curing piles, etc., without the use of surgical instruments, etc :—A leaf of iron of a superior quality is to be freed, first of all, from rust by manas shila or makshika. It is then to be smeared with a paste made of the roots of shalincha rubbed with the juice of the same, and burnt by means of a fire, made of charcoal prepared from the shal wood, and blown by

bellows. The intensity of the heat is to be tested by means of decoction of triphala. When sufficiently burnt, the iron is to be removed from the fire and immersed at once into the pure decoction of triphala. If it has not been completely incinerated, the iron is again to be burnt in the same way and immersed in the decoction of triphala. It is then to be cleansed properly, and powdered in an iron mortar, by means of an iron rod, and then again finely powdered in a boat-shaped iron mortar by being rubbed by an iron pestle. The iron is then to be mixed with the juices of the under mentioned drugs in such a way as to resemble mire, and then heated over fire made of cowdung cakes in an iron cauldron or in an earthen pot sufficiently strong. The iron is next to be subjected to putam after having been rubbed with the juice of each of the following separately, and in accordance with the order in which they have been given :—triphala, ardraka, bhringaraja, kesharaja, bidari-kanda, mana, bhallataka, chitraka, shurana, hasti-karna-palasha, and kulisha (khanda karna).

The iron is to be powdered each time after it is heated in the afore-said way. Sixteen palas of this iron\* is to be roasted in an iron cauldron with a decoction prepared from triphala, seventeen palas in weight, boiled with 136 palas of water which is to be reduced to seventeen palas. In course of the roasting, eight palas of clarified butter is to be put into

\* Iron is generally not to be prepared in quantities greater than 13 palas. The present case is an exception.

the iron which is to be turned all along with an iron ladle. The preparation is to be considered complete, as soon as the clarified butter is found to float on the surface in a clear state. It may however be still roasted according as it is intended to make it soft, harder, and very stiff (see process No. 5 page 77.)

The minimum dose of the iron, thus prepared, is one racti (i.e., it may be increased up to six ractis a day) to be taken every morning with clarified butter and honey. After taking the medicine, the patient is to drink a little of cow's milk which is to be increased day by day. In the absence of cow's milk, goat's milk may be used. The diet should be prepared with clarified butter and be of a nutritious character.

This medicine increases at once the power of digestion. It cures bhasmakagni or an abnormally strong appetite, all the diseases due to an abnormal excess of vayu and pittam, leprosy, visama-jvaram (malaria, kalazar, etc.), gulma, eye-diseases, anemia, excess of sleep, lethargy, aversion to food, all sorts of colic, prameha, dysentery, dropsy, bleeding, and especially piles of all sorts. It increases strength, nutrition, beauty, activity, longevity and voice. It is easily digested and is agreeable to the patient. It increases procreative power and is a destroyer of senile decay. It has been found to cure piles immediately.

बहुस्त्रिंशोविधिः ।

सुधासागरलौहम् ।

अब्यवहृतपूर्वस्य गुल्मतृणवनस्पतेः ।  
 रसेन दिवसे लौहं मर्दयित्वा निशा पुटेत् ।  
 द्वादशवर्षकालं हि नित्यमेव समाचरेत् ।  
 अब्यवहृतपूर्वं हि रसं नित्यं प्रयोजयेत् ॥  
 पूर्वं संमर्द्दितं येन तदूरसं न पुनर्ददेत् ।  
 एतस्य सुधालौहस्य यवमात्रं प्रदापयेत् ॥  
 वृक्षमेव जराजीर्णं यतः स तरुणायते ।  
 दन्तानामुद्धमो पुनः शुक्रकेशस्य कृष्णता ॥  
 दृढता लोलचर्मणस्तस्यैव जायते पुनः ।  
 स्थितं पक्फलोदरे पक्तां हि विनाशयेत् ॥  
 लौहमेतत् सुधातुल्यं मत्तेच दीर्घायुः संप्रदम् ।  
 मात्रैका हि ग्रहीतव्या चैकविंशसमान्तरे ॥

Thirty-fourth process.

(*Sudha Sagara Lauham.*)

Iron is to be rubbed during certain part of the day with the juice of the leaves of any tree, herb, or grass. It is then to be dried by the sun and then heated by putam at night. This process is to be performed for 4380 days, juice of leaves of a new tree, herb, or grass being used each of

these days. In other words, the iron is to be heated by putam for 4380 times, after having been rubbed each time with the juice of the leaves of a tree, herb, or grass, which is to be used in this way for one day only, so that 4380 different kinds of vegetable juices are required to complete the process. The tree, herb, or grass which has once been used must not be used for the second time. The iron, thus incinerated, has the property of re-juvenating an old man. It causes the growth of new teeth in place of fallen ones, even in old age ; turns grey hair black ; and makes the skin of an old man as tight as in youth. Ripe fruit turns green, if a grain of this iron is kept for a few hours inside the former. One dose of this medicine is to be taken once in every 20 years.

लौहभस्मनः परीक्षा ।

मध्वाज्यमृतलौहं च रूप्यसंपुटके क्षिपेत् ।  
 रुद्ध्वा ध्मातं सुसंग्राह्यम् रौप्यकं पूर्वमानकम् ।  
 तदा लौहं मृतं विद्यान्निरुत्थं ज्ञायते च तत् ॥  
 रूप्यस्य पूर्वमानस्य हासेन ज्ञायतेऽमृतम् ।  
 उत्थितं च विजानीयान् मारयेत् तत् पुनर्भिषक् ॥

*Test of incinerated iron.*

Incinerated iron, mixed with honey and clarified butter, is to be confined in a silver samputam, and subjected to heat by putam. If in so doing, the quantity of the silver does not undergo any diminu-

tion, the ashes of the iron are to be considered actually incinerated and incapable of being restored to their original condition of un-incinerated iron. In case, the silver is found short of the original quantity, the iron is to be considered un-incinerated and capable of being restored to its original condition. In that case, it is to be incinerated again.

### उत्थितलौहस्य निरुत्थीकरणम् ।

( १ )

अनिरुथं मृतं लौहं पक्षब्यं मित्रपञ्चकैः ।  
यद्येवं स्यान्निरुथञ्च सेव्यं वारितरं हि तत् ॥  
मधु सर्पिस्तथा गुंजा टङ्कनं गुग्गुलुस्तथा ।  
मित्रपञ्चकमेतत् तु गणितं धातुमेलने ॥

*How to deprive the ashes of iron of the power of being restored to their original condition.*

( १ )

Ashes of iron, which can be restored to their original state, should be brought to a state in which it is impossible for them to be so restored, and this may be done, if the ashes are roasted with the panchamritam, viz. honey, clarified butter, gunja, tankanam, and guggulu.

( २ )

गोघृतं गन्धकं लौहं तपत्खलवे विमद्येत् ।  
दिनैकं कन्यकाद्रावै रुद्धू । गजपुटे पचेत् ।  
इत्येवं सर्वलोहानां कर्तव्यं स्यान्निरुथितम् ॥

(2)

Ashes of iron are to be rubbed in a hot mortar with cow's ghee, sulphur, and juice of kanya for one day and then heated by *Gajaputam*, resulting in the ashes being incapable of being restored to the state of original iron.

अथ मृतलौहस्यामृतीकरणम् ।

( १ )

तोयाष्टभागशेषेण त्रिफलापलपञ्चकम् ।

घृतं क्राथस्य तुल्यं स्याच् चूर्णं तुल्यं मृतायसः ॥

पाचयेत् ताम्रपात्रे च लौहदव्यां विचालयेत् ।

मृदग्निना पचेत् तावद् यावत् सर्वं हि जीर्यते ॥

लौहतुल्या शिवा योज्या सुपकमेव तारयेत् ।

योगवाहमिदं ख्यातं मृतलौहं महामृतम् ॥

*Nectarization of incinerated iron.*

( १ )

In a copper cauldron, heated by a mild fire, five palas of iron are to be roasted with an equal quantity of clarified butter and the same quantity of decoction of triphala (prepared by boiling five palas of triphala fruits with 40 palas of water, reduced by heating to 5 palas), the whole thing being turned by an iron ladle till the iron is completely roasted. It is then to be again roasted with an equal quantity of powdered haritaki.

( २ )

गुड्स्य कुड्वे पक्षं लौहभस्म पलान्वितम् ।  
कोलप्रमानं रोगेषु तच्च योगेन योजयेत् ॥

( २ )

One pala of incinerated iron is to be mixed by heat with four palas of iron and made into pills of the size of a plum fruit. One such pill may be used in diseases with suitable accompaniments.

( ३ )

घृतं तुल्यं मृतं लौहं लौहपात्रे स्थितं पचेत् ।  
जीर्णे घृते समादाय योगवाहं प्रयोजयेत् ॥

( ३ )

Equal quantities of incinerated iron and clarified butter are to be roasted in an iron pot till the latter is dried up altogether. The iron, thus prepared, is a *joga-bahi*, i.e. a thing which increases the property of any other thing with which it is mixed.

रसायनप्रयोगे लौहस्य संस्कारविशेषः ।

( ४ )

घृतमधुगुञ्जाटकसमं लौहभस्म मर्हयेच्च विचक्षणः ।  
धमेद्वहौ पुनलौहं तदा योज्यं रसायने ॥

( ४ )

Ashes of iron become especially fit for being used in medicines meant for preventing and curing senility, if they are rubbed with clarified butter, honey, gunja, and tankanam.

( ५ )

लौहारकूटताम्रकटाहे दृढ़मृन्मये वा प्रणम्य शिवम् ।  
 भस्मायः पचेदचपलः काष्ठे न्धनवहिना मृदुना ॥  
 निक्षिप्य त्रिफलाजलमृदितं यत्तद् घृतश्च दुग्धश्च ।  
 सञ्चालय लौहमय्या दर्व्या लग्नं समुत्पाद्य ॥  
 मृदुमध्यमखरभावैः पाकस्त्रिविधोऽत्र वक्ष्यते पुंसाम् ।  
 पित्तसमीरणश्लोषमप्रकृतीनां मध्यमस्य समः ॥  
 त्रिविधोऽपि पाक ईदृक् सर्वेषां गुणकृदेव न तु विफलः ।  
 प्रकृतिविशेषे सूक्ष्मौ गुणदोषौ जनयतोत्यल्पम् ॥  
 अभ्यक्तदर्विलौहं सुखदुःखसखलनयोगि मृदुमध्यम् ।  
 उज्जितदर्विखरं परिभाषन्ते केचिदाचार्याः ।  
 अन्ये विहीनदर्विप्रलेपमीषत् खराकृति ब्रुवते ॥  
 मृदुमध्यमर्ढचूर्णं सिकतापञ्चोपमं तु खरम् ।  
 विज्ञाय पाकमेवं द्रागवतार्थं चितौ चणान् कियतः ॥  
 विश्राम्य तत्र लौहे त्रिफलादेः प्रक्षिपेच्च चूर्णम् ।  
 यदि कर्पूरप्रासिर्भवति ततो विगलिते तदुष्णात्वे  
 चूर्णीकृतमनुरूपं चिपेत् तत्तु प्रयत्नतः ।  
 पक्तं तदश्मसारं सुचिरं घृतस्थितं  
 गोदोहनादिभाग्डे लौहाभावे संरक्षणीयम् ।

यदि तु परिम्नु तिहेतौ घृतमीक्षेताधिकं ततोऽन्यस्मिन्  
 भागडे निधाय रक्षेद् भाव्युपयोगो ह्यनेन महान् ॥  
 अयसि विश्वकीभूते स्त्रेहस्त्रिफलाघृतेन संपाद्यः ।  
 एतत्तत्त्वो गुणोत्तरमित्यमुनैव स्त्रेहनीयं तत् ।  
 अत्यन्तकफप्रकृतेभर्त्त्रगुणमयसोऽमुनैव शंसन्ति ।  
 केवलमर्पीदमशितं जनयत्ययसोगुणान् कियतः ॥  
 अथवा वर्णितविधिमारितं कृष्णान्नमादाय ।  
 लौहचूर्णचतुर्थार्द्धं समद्वित्रिचतुःपञ्चगुणभागम् ॥  
 प्रक्षिप्यायः प्राग्रवत् पचेदुभाभ्यां भवेद् रजोयावत् ।  
 तन्मानानुकृतेः स्मृतिः स्यात् त्रिफलादिद्रव्य-  
 परिमाणम् ।

इदमाप्यायकमिदमतिपित्तनुदिदमेव कान्तिवल-  
 जननम् ।

स्तम्भाति तृट्कुधौ परमधिकाधिकमात्रया युक्तम् ।  
 नानाविधरुक् शान्त्यै कान्त्यै पुष्टैश्च शिर्व  
 समभ्यर्चय ।

सुविशुद्धे ऽहनि पुण्ये तद्मृतमादाय लौहाख्यम् ।  
 दशकृष्णलपरिमाणं शक्तिवयोभेदमाकलय्य पुनः ।  
 समस्तृणामलपात्रे लौहे लौहेन मर्दयेच्च पुनः ।  
 दत्ता मध्वनुरूपं तदनु घृतं योजयन्नाधिकम् ॥

ओँ अमृतेन्द्रं भक्षयामि नमः स्वाहेति  
 मन्त्रमुच्चार्य भक्षनीयं तत् ।  
 जग्धवा तदमृतसारं नोरं वा क्षीरमेव नुपिवेत् ।  
 कान्तक्रामकममलं सर्जरसं पिवेदनु ।  
 आचम्य च ताम्बूलं घनसारसहितमुपयोज्यम् ॥

(5)

Incinerated iron is to be placed with decoction of triphala, milk, and clarified butter, in a cauldron made of iron, brass or copper, heated by a very mild fire made of wood, an iron ladle being used for turning the contents of the cauldron every now and then. This preparation may be of three kinds, viz. mild, medium, and dry. They are especially beneficial to patients having an excess of pittam, vayu, and kapha, respectively. One having an equilibrium of the doshas (vayu, pittam, and kapha) should use a preparation which is also neither mild nor dry i.e. of medium softness. Each of these three different kinds of preparations, although especially efficacious to patients of especial temperaments, is beneficial, at least to a certain extent, to patients in general, irrespective of temperaments. A mild preparation in this case means that in which the iron sticking to the ladle can be separated easily; a medium preparation is that in which the iron paste sticking to the ladle can be separated with difficulty; a dry preparation in this case is that in which the

iron paste is so dried as not to attach itself to the ladle altogether or to do it only to a slight extent. The mild and the medium are partially powdered, whereas the dry preparation of iron is in a state of sands. On the completion of the preparation of the iron the cauldron is to be got down quickly from the oven, and after a few minutes, powdered triphala, etc. may be mixed with the product. Some camphor may also be mixed with it, when the product is sufficiently cooled. The iron, thus prepared, is to be very finely powdered, and kept with a sufficient quantity of clarified butter in an iron pot or in an earthen vessel previously used for keeping milk. In case, the clarified butter is found to be much in excess of the quantity required to keep the iron soft, a quantity of the former may be taken out and kept in a separate pot. This ghee is very useful. It may be used to soften the iron preparation in case it loses its softness. A patient having an abnormal excess of kapha should take iron mixed with this ghee, which, even if taken alone, produces a part of the effects which are produced by iron prepared in the aforesaid way.

The incinerated iron may also be roasted in the afore-said manner, after having been mixed with decoction of triphala, clarified butter, milk, and one fourth or half or an equal or double or triple or four fold or five fold its quantity of powdered black mica, duly incinerated (see vol. II). The powder, thus prepared, is soothing to the system, destroyer of all abnormal excess of pittam, and is a giver of strength

and beauty. If taken in doses gradually increased to a large quantity every day, it does away with thirst and hunger altogether without impairing the strength and longevity of the latter. After making due obeisance to God, the medicine should be begun to be taken on an auspicious day, in doses of ten ractis a day (a dose which is modifiable having regard to the age and strength of the patient), which should be rubbed with honey and ghee in an iron mortar by an iron rod. The following mantra is to be uttered at the time of taking the medicine :—“Om amritendra bhakshayami nama swaha.” After taking the medicine, a little of water or milk is to be taken. A little after that, juice or decoction of nagaramusta, mixed with pure rala or exudation of a sarja tree, should be taken.

लौहादीनां सेवनमात्रा ।

गुज्जामात्रं रसेन्द्रस्य हेम्नो भस्म च भक्षयेत् ।  
 तारं त्रिगुञ्जकं सेव्यं ताम्रभस्म द्विगुञ्जकम् ॥  
 लौहाद्रवनागवङ्गानां यशोदस्य तथान्येषाम् ।  
 धातूनां ज्ञायते मात्रा षड्गुज्जाप्रसिता खलु ॥  
 कांस्यपित्तलयोर्भस्म भक्षयेत् ताम्रभस्मवत् ।  
 वज्रं यवद्रयमितं तालकं यवसप्तकम् ।  
 ततो बुद्ध्या भिषण् दद्यान् मात्रावित्  
 क्षेत्रज्ञानतः ॥

*Doses.*

The following are the doses in which mercury, etc. are generally given :—mercury, one gunja a day ; incinerated gold—one gunja a day ; incinerated silver, 3 gunjas a day ; incinerated copper, 2 gunjas a day ; iron, mica, lead, tin, zinc, and other metals (each incinerated), six gunjas a day ; incinerated bell-metal and brass—two gunjas a day ; incinerated diamond, 2 javas a day ; purified or incinerated haritalam, seven javas a day. In especial cases, the physicians, having regard to the age and constitution of the patient, should use their own discretion in the matter of doses.

लौहभस्मभक्षणमंत्रः ।

ॐ अमृतेन्द्रं भक्षयामि नमः स्वाहा ।

लौहभस्मानुपानम् ।

( १ )

शूले हिङ्गु घृतान्वितं मधुयुतं कृष्णा पुराणज्वरे ।  
 वाते साज्यरसोनकः श्वसनके द्वौद्रान्वितं त्रूथषणम् ॥  
 शीते व्याललतादलं समरिचं मेहे वरा सोपला ।  
 दोषाणां त्रितयेऽनुपानमुदितं सद्बौद्रमाद्रोदकम् ॥  
 घृतेन वातके देयं मधुना पित्तजे ज्वरे ।  
 श्लेष्मपित्ते चार्द्दकेन निर्गुणज्या शीतवातके ॥  
 शुण्ठीं वाते सितां पित्ते कफे कृष्णां प्रदापयेत् ।  
 सन्धिरोगे त्रिजातकं प्रोक्तं लौहानुपानकम् ॥

*Anupanas or accompaniments of iron.*

( १ )

Incinerated iron is to be taken with hingu (purified by being fried with ghee) and honey in colic ; with powdered pippali in chronic fever (such as malaria, kalazar, etc.) ; with ghee and garlic juice in rheumatism, paralysis, and other diseases due to an excess of vayu ; with honey and trikatu in asthma ; with the juice of brischikali mixed with powdered maricha in coldness ; with triphala and sugar-candy in spermatorrhoea ; with honey and ginger juice in diseases due to an excess of the three doshas ; with clarified butter in fever due to an excess of vayu ; with honey only in fever due to an excess of pittam ; with the juice of ardraka in diseases due to an excess of kapha and pittam ; with the juice of nigrundi in shivering due to an excess of vayu ; with powdered shunthi in diseases due to an excess of vayu ; with sugar in pittam, with pippali in kapha ; and with trijatakam in diseases affecting bone joints.

Foot note :—The general rule with regard to the taking of a mineral drug, either in the form of powdered ashes or in the form of a pill, is this :—It is first of all to be rubbed in a small stone mortar with a little of honey (even when there is no mention of it, unless it is explicitly prohibited or considered harmful in a particular case) and then again rubbed with the anupanam or accompaniment prescribed. When the drug is thus sufficiently rubbed, it is to be taken by licking or drinking, as the case may be.

( २ )

वस्त्रं वस्त्रार्द्धमानं च यथायोगेन योजयेत् ।  
 वरया सह लौहं हि वलीपलितनाशनम् ॥  
 कज्ज्वलीमधुकृष्णाभ्यां श्लेषमरोगनिवारणम् ।  
 खण्डया सचतुर्जातं रक्तपित्तविनाशनम् ॥  
 पुनर्णवायुतक्षीरैर्बलवृद्धिकरं परम् ।  
 पुनर्णवारसेनैव पाण्डुरोगनिसूदनम् ॥  
 सनिशं भसितं लौहं पिप्पल्या मधुना सह ।  
 विंशतिं च प्रमेहानां नाशयेन् नात्र संशयः ॥

( २ )

Incinerated iron, in doses of four and half ractis, is to be taken with the following anupanams :—with triphala in senile decay ; with kajvali (equal quantity of sulphur and mercury, turned into a black powder), honey, and pippali in diseases due to an excess of phlegm ; with khanda gurh mixed with chaturjata in ractapittam ; with cow's milk mixed with the juice of punarnava for increasing strength and vigour ; with the juice of punarnava in anemia ; with the juice of haridra and powdered pippali, mixed with honey, in 20 different kinds of spermatorrhoea including gonorrhoea.

( ३ )

शिलाजतुयुतं लौहं मूत्रकृच्छ्रनिवारणम् ।  
 वासकपिप्पलीद्राक्षालौहानां मधुना सह ॥

गुटिकां भक्षयेत् प्रातः पञ्चकासनिवृत्तये ।  
 ताम्बुलरससंयुक्तं भक्षयेत् लौहमुत्तमम् ॥  
 अग्निदीप्तिकरं वृष्यं देहकान्तिविवर्ज्ञं नम् ।  
 त्रिफलामधुसंयुक्तं सर्वरोगेषु योजयेत् ॥  
 षथ्यासितालौहभस्म यथोक्तगुणदं भवेत् ।  
 किमत्र बहुनोक्तेन देहलोहकरं परम् ॥

( ३ )

Incinerated iron may be used with shilajatu in gleet and stricture ; with basaka, pippali, draksha, and honey (all rubbed together) in all sorts of cough ; with the juice of betel leaves for increasing the power of digestion, nutrition, and physical beauty ; with triphala and honey in all sorts of diseases ; with triphala and sugar for increase of strength.

लौहसेवने पथ्यम् ।

लावकस्तित्तिरिगोर्धा मयूरशशकादयः ।  
 वटकः कलविंकश्च वर्त्तिश्च हरितालकः ॥\*  
 श्येनकञ्च वृहस्पावो वनविस्तिरकादयः ।  
 हितकरमृगादीनां मांसं जांगलकं शुभम् ॥  
 मद्गुरो रोहितः श्रेष्ठः शकुलश्च विशेषतः ।  
 मत्स्यराजा इमे प्रोक्ताः हितमत्स्याश्च ये नवाः ।

\* कलविंकभटकः ।

प्रशस्तं पापिताफलं पटोलं डिंडिसी तथा ।  
 प्रलम्बाभीरुवेत्रायं ताड़कं तण्डुलीयकम् ॥  
 वास्तुकं धान्यशाकं च स्वर्णालुकपुनर्णवम् ।  
 नारिकेलं च खर्जुरं दाढ़िमं लवलीफलम् ॥  
 शृंगाटकं च पकाम्रं द्राक्षालताफलानि च ।  
 जातीकोषं लवंगं च पूर्णं ताम्बूलपत्रकम् ॥

*Dietary.*

The following dietary is salutary for the person who takes iron :—

laba (a migratory bird—a sort of a quail), tittiri (the francoline partridge), godha (iguana), peacock, hare, bataka (a bird, popularly called, batkal), kalabinka or chataka (sparrow), barti (a bird popularly called, ‘bater’), haritala (green partridge), hawk, big laba, all sorts of deer ; fresh and wholesome fish, such as, madgura, rohita, and shakula ; vegetables like papita, patola, dindisi, eatable sprout arising inside a palm fruit, shatavari, soft blossoms of a betra plant, the soft portion inside the uppermost part of a palm tree, tanduliyaka, bastu, leaves of dhanya plant, karnalu, punarnava, cocoanut, date fruit, pomegranates, lavali fruit, shringataka, ripe and sweet mango, grapes, jatiphala, lavanga, betel-nut, and betel leaves.

लौहसेवने अपथ्यम् ।

( १ )

नाशीयालूलकुचं कोलं कर्कन्धुं वदराणि च ।  
जम्बीरं बीजपूरञ्च करमर्द्दकतिन्तिडीम् ॥  
आनूपानि च मांसानि क्रकरं पुण्ड्रकादिकं ।  
हंससारसदात्युहमदृगुकाकवलाहकान् ॥  
माषकन्दकरीराणि घनकं च कलम्बकम् ।  
कुष्माण्डकंच कर्कटिं केवुकञ्च विशेषतः ॥  
कदर्लीं कालशाकञ्च कशेरुं कर्कटीं तथा ।  
विदलानि च सर्वाणि ककारादींश्च वर्जयेत् ॥

*Prohibitions.*

( १ )

The following are to be avoided by one who takes iron :—lakucha, kola, karkandhu, badara, lemon fruit, vijapura, karamarda, tintiri, meat of animals other than those enumerated in page 84, karkata bird, pundraka, goose, swan, water crow, madgu, crow, crane, masha gram, tubers of all kinds (such as potato, radish, onion, etc.), karira (shoot of a bamboo, and a thorny plant of that name), chanaka gram, kadamba fruit, kushmanda, karkoti, kebuka, banana fruit, pot herbs, kasheru, karkati, and all sorts of pulses.

( २ )

कुष्मारण्डं तिलतैलं च रसोनं राजिकां तथा ।  
 मद्यमम्लरसं चैव त्यजेत् लौहस्य सेवकः ॥  
 अहितमत्स्यवार्त्ताकं माषं च कारवेल्लकम् ।  
 व्यायामं सर्वसन्धानमासवश्च सदा त्यजेत् ॥  
 अत्युपवेशनं जह्नात् श्रमं चैवातिभाषणम् ।  
 ह्लानपानाशनादीनामाधिक्यं शोतवातयोः ॥  
 अकालभोजनश्चैव विरुद्धाशनमेव हि ।  
 दिवास्वापं तथा नक्तं जागरणं सदा त्यजेत् ॥  
 वातपित्तकृतः सर्वान् कट्टम्लतिक्ततुवरान् ।  
 तत्क्षणाशहेतूंश्च मैथुनकोपसंश्रमान् ।  
 मारकं रसलोहानां सर्वथा हि परित्यजेत् ॥

( २ )

One who takes iron should avoid the following:—  
 kushmanda, tila oil, rasona, raji, wine, sour things,  
 bad fish, jeera, vartaku, masha gram, karbella,  
 physical exercise, all sorts of fermented things,  
 asava, sitting for a long time, physical exertion,  
 excess of talking, excess of bathing, drinking,  
 eating, and exposure to coldness and wind, eating  
 at unusual times, eating articles of food stuff  
 which, if taken with the same meal produce  
 injurious effects (such as milk with fish, meat,  
 or sours); sleeping in day time; keeping late

hours at night ; all things having the property of increasing vayu and pittam ; things which are pungent, sour, bitter, and astringent ; sexual indulgence ; anger ; physical exertion ; and all things calculated to kill mercury and the metals.

लोहव्यापशाशनं चूर्णम् ।

जीर्णे लोहे तु पतति चूर्णं भुजीत सिद्धिसाराख्यम् ।  
लोहव्यापन् नाशयति तद् वर्ज्यति जाठरं वह्निम् ॥

*Remedy of evils due to irregularities  
in taking metals.*

When incinerated iron (or any other metal) is digested in the stomach, a dose of the powder named siddhisara (described below) should be taken in order to counteract any evil arising out of irregularities committed while taking the iron (or any other metallic preparation).

सिद्धिसारः ।

पथ्यासैन्धवशुण्ठीमागधिकानां पृथक् समं भागम् ।  
त्रिवृताभागौ निम्बुभाव्यं स्यात् सिद्धिसाराख्यम् ॥  
काले मलप्रवृत्तिर्घवमुदरे विशुद्धिरुद्गारे ।  
अङ्गेषु नावसादो मनःप्रसादोऽस्य परिपाके ।  
रद्भिर्द्वादशकादूर्ध्वं वृद्धिरस्य भयप्रदा ॥

*Siddhi sara.*

Powders of haritaki, saindhava, shunthi, white jeera—each equal in quantity ; and trivrit, double the quantity of each of the above-mentioned, should be subjected to bhavana with the juice of lemon. Dose—1 racti, to be gradually increased to 12 ractis, which should not exceed on any account. This medicine causes movement of the bowels in due time, lightness of the stomach, freedom of the belching (of wind from the stomach) from acidity and toxin, comforts of the limbs, and cheerfulness of the mind.

अपकलौहस्य अवगुणः ।

अल्पौषधिस्तोकपुटहीनगन्धकपारदैः ।  
पकं हि लौहजं चूर्णमायुःक्षयकरं परम् ॥

*Evil effects of taking iron not properly incinerated.*

Iron roasted with too little in quantity of the liquids prescribed, or by a fewer than the prescribed number of putams, or by being rubbed with sulphur or mercury of inferior quality (i.e. not properly purified), is injurious, and serves to shorten the longevity of the man who takes it.

अशुद्धलौहसेवनजनितविकारानां शान्तिः ।

( १ )

सुनिरसपिष्ठविङ्गः सुनिरसलीढ़ं चिरस्थितं घर्मे ।  
द्रावयति लौहदोषान् वर्ह्णनवनीतपिण्डमिव ॥

*Remedy of the evil effects of iron not properly incinerated.*

( १ )

Evil effects of impure iron are removed, if one takes biranga, previously rubbed with the juice of vasaka, and exposed for a long time to the heat of the sun, mixed with a sufficient quantity of the juice of vasaka.

( २ )

आरग्वधस्य मज्या रेचनं कीटशान्तये ।  
 भवेदप्यतिसारश्च पीत्वा दुर्घं तु तं जयेत् ॥  
 यदि लौहविकारेण उदरे शूलसंभवः ।  
 तदाद्र्दकविङ्गं तु विङ्गरससंयुतम् ।  
 पिवेद्वा खण्डमधुना एलाचूर्णं दिनत्रयम् ॥

( २ )

Purgation by the oily part of aragbadha is to be resorted to for the purpose of destroying worms (growing from the use of iron, not incinerated with mercury). In case of diarrhoea being caused by the purgation, it is to be cured by the drinking of milk. Colic in the stomach, due to use of bad iron, may be cured by using ginger and biranga, taken for 3 days with the juice of biranga, or by taking for 3 days powdered ela mixed with khanda gurh and honey.

लौहस्य द्रावणम् ।

( १ )

देवदालीरसै भाव्यं गन्धकं दिनसप्तकम् । \*

तेन प्रवापमात्रेण लौहं तिष्ठति सूतवत् ॥

*Liquefaction of iron.*

( १ )

Sulphur is to be subjected to bhavana with the juice of devadali for seven days. This sulphur, thrown upon iron, melted by fire, makes the iron resemble mercury (even after the heat is discontinued).

( २ )

सुरदालिभवं भस्म नरमूत्रेण गालितम् ।

त्रिसप्तवारं तत्कारं वापेत् कान्ते द्रुतिर्भवेत् ॥

(2)

A kshara or alkali is to be prepared by dissolving the ashes of devadali with human urine, filtering it for 21 times and then drying it up by heat. A little of this alkali, if thrown upon melted kanta iron, keeps the latter in a liquefied state even after the heat is removed.

\* द्रुते द्रव्यान्तरक्षेपे लौहादौ क्रियते हि यत् ।

स प्रवापः प्रतीवाप्तदेवाच्छादनं मतम् ॥

( ३ )

गन्धकं कान्तपाषाणं चूर्णयित्वा समं समम् ।  
द्रुते लौहे प्रतीवापो देयो लौहाष्टकं द्रवेत् ॥

(3)

Eight different kinds of iron can be kept in a state of liquefaction, even after the removal of heat, if equal quantities of powdered sulphur and kanta iron are put upon them, while in a melted condition.

अथ मण्डूरम् ( लौहकिण्ठम् ) ।

सिंहानिका च सिंहानं लौहकिण्ठं च मण्डूरम् ।  
प्रतापिताद् घनाहताल् लौहाच् च्युतं मलं हि तत् ॥  
यज्ञौहे यद्गुणं प्रोक्तं तत् किण्ठे तद्गुणांशकम् ।  
तस्मात् सर्वत्र मण्डूरं रोगशान्त्यै प्रयोजयेत् ॥  
किण्ठाद् दशगुणं मुण्डं मुण्डात् तीक्ष्णं शतोन्मितम् ।  
तीक्ष्णाल् लक्ष्मणं कान्तं भक्षणात् कुरुते नृणाम् ॥  
तस्मात् कान्तं सदा सेव्यं जराब्याधिहरं परम् ।  
कान्ताभावे प्रदातव्यं स्वर्णं वा रूप्यमेव वा ।

*Mandura.*

If iron is heated red hot, and hammered, small pieces throw themselves out of it, and scatter themselves all round. These particles of iron are called mandura. The mandura of a particular

iron possesses a part of the properties of the latter. Mandura also may therefore be used in medicines. Munda iron is ten times as efficacious as mandura. Tikshna iron is hundred times as efficacious as munda, and kanta is hundred thousand times as efficacious as tikshna. Kanta iron should therefore be used for the purpose of destroying diseases and senility. In the absence of kanta iron, gold or silver is to serve as a substitute.

मण्डूरस्य भेदाः ।

ईषच्छवि गुरु स्त्रिग्धं मुराडकिट्टं जगुर्बुधाः ।  
 भिन्नांजनप्रभं यत् तु विशेषाद् गुरु निर्वणम् ॥  
 निः कोटरं च विज्ञेयं तीक्ष्णकिट्टं मनीषिभिः ।  
 पिंगं रुचं गुरुतरं यदर्धमवकोटरम् ॥  
 छिन्ने च रजतच्छायं तत् किट्टं कान्तलौहजम् ॥

*Varieties of mandura.*

Mandura from munda iron is slightly coloured, heavy, and soft; that from tikshna iron is like a collyrium of mixed ingredients, is much heavy, and has a smooth surface. The mandura which comes out of kanta iron is of grey colour, coarse, heavier than other manduras, with half its surface devoid of hollows, and it presents a sectional surface as glazy as silver, when cut into two pieces.

मण्डूरस्य व्यवहारयोग्यता ।

( १ )

अकोटरं गुरु स्त्रिग्धं दृढं शतसमाधिकम् ।  
चिरोत्थितजनस्थाने संस्थितं किण्वमाहरेत् ॥

*Fitness of mandura for use in medicines.*

(1)

The mandura which should be used in medicines should be of the following description :—It is devoid of hollows, heavy, soothing, strong, of more than a hundred years' standing, and collected from an old village.

( २ )

शतोर्ढ्मुक्तमं किण्वं मध्यश्वाशीतिवार्षिकम् ।  
अधमं पष्टिवर्षीयं ततोहीनं विषोपमम् ॥

( २ )

Mandura of over hundred years old is the best ; that of over 80 years is of moderate efficacy, and that of sixty years' standing is the least efficacious. Mandura less old than the last-mentioned is like poison and should be avoided for medicinal purposes.

मण्डूरस्य शोधनमारणम् ।

प्रथमोविधिः ।

अद्वाहारेर्धमेत् किण्वं लौहजं तद् गवां जले ।  
निक्षिपेदक्षपात्रस्थे सप्तवारं प्रयत्नतः ॥  
चूर्णयित्वा ततः काथैद्विंगुणैस्त्रिफलोद्भवैः ॥  
आलोड्य च धमेद वहौ मण्डूरं जायते वरम् ॥

*Incineration of mandura.***First process.**

Manduram is to be heated by means of char-coal prepared from bibhitaki wood, and then immersed in cow's urine contained in a pot made of the same wood. It is then to be powdered very fine and roasted with double its quantity of decoction of triphala (by being boiled in a cauldron over fire).

## द्वितीयोविधिः ।

गोमूत्रैस्त्रिफला काथ्या तत्काथैः सेचयेच्छन्नैः ।  
लौहकिं द्वं सुतसं तु यावज्जीर्यति तत् स्वयम् ॥

**Second process**

A decoction of triphala is to be prepared by boiling it with cow's urine. Mandura, heated red hot, is to be immersed in this liquid. Repetition of this process leads to the incineration of the mandura.

## तृतीयोविधिः ।

मण्डूरं चूर्णितं शुद्धणं गोमूत्रेऽष्टगुणे पचेत् ।  
चूर्णितं पुनरेव तत् स्वकार्येषु नियोजयेत् ॥

**Third process**

Mandura is to be powdered very fine and then roasted with eight times its weight of cow's urine. When sufficiently roasted, it is to be powdered again and used where necessary.

## मण्डूरस्य अवहारः ।

त्रूथषणं त्रिफला मुस्ता विङ्गं चव्यचित्रकम् ।  
दार्वी ग्रन्थि देवदारु तुल्यं तुल्यं विचूर्णयेत् ॥

ग्रत्येकं किट्टसंतुल्यं तेन सह विमिश्रयेत् ।  
 भक्षयेत् कोलमात्रं तु जीर्णान्ते तक्रभोजनम् ॥  
 पाणदुशोफहलीमं च उरुस्तस्मं च कामलाम् ।  
 अर्शांसि हन्ति सत्वरं हंसमण्डूरकाह्वयम् ॥

*Use of mandura.*

Incinerated mandura, mixed with an equal quantity of each of the following, and taken in doses of one kola (all combined) a day, cures pandu (anemia), shotha (dropsy), halima (jaundice of the worst type), urustambha (carbuncle in the thighs), kamala (jaundice), and arsha (piles) :—trikatu, triphala, musta, biranga, chavya, chiraka, darvi, granthi, and deva-daru. Mandura, thus used, is called the hansa-mandura. Butter-milk should be drunk after the medicine appears to have been digested in the stomach.

मण्डूरस्य द्रावणम् ।  
 मुनिरसपिष्ठं विङ्गं मुनिरसलीढं चिरस्थितं घम्मे ।  
 द्रावयति लौहकिट्टं वह्निर्वनीतपिण्डमिव ॥

*Liquefaction of mandura.*

Rust of iron is liquefied and assumes the shape of butter, if it is immersed in a liquid paste, made of biranga pestled with the juice of agastya and dissolved in the same liquid, and exposed for a long time to the heat of the sun.

द्वितीयोऽध्यायः ।

CHAPTER II.

अथ यशोदम् ।

रसकस्य विजानीयाद् यशोदं सत्वमेव हि । ◎  
तदेव खलु वैद्यानां यशोदं धीमतां परम् ॥

*Jasoda (Zinc).*

Jasoda is the essence of rasaka or calamine (see page 125, Vol II). Literally, it means a thing which helps the earning of fame. It is really a thing which enables a learned physician to earn reputation.

अस्य गुणाः ।

यशोदं तुवरं तिक्तं शीतलं कफपित्तहृत् ।  
चक्षुष्यं परमं मेहपाणुश्वासविनाशनम् ॥

*Its properties.*

Jasoda is astringent, bitter, cool, pacifier of kapha and pittma, beneficial to eye-sight, and destroyer of spermatorrhoea, gonorrhoea, jaundice, and asthma.

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\* द्वितीयखण्डे १२५ पृष्ठं द्रष्टव्यम् ।

द्वितीयोऽध्यायः ।

१०

यशोदस्य शोधनम् ।

प्रथमोविधिः ।

यशोदमभिविद्रुतं दुग्धमध्ये तु ढालयेत् ।  
एकविंशतिवारैश्च ततोऽयं शुद्धिमान् यात् ॥

*Purification of Jasoda.*

*First process.*

Jasoda is purified, if it is immersed into milk for twenty one times, after it is melted each time.

द्वितीयोविधिः ।

द्वितीयजण्डे २४२ पृष्ठे सर्णशोधनप्रकरणे द्वितीयोविधिः द्रष्टव्यः ।

*Second process.*

See Process No. 3, page 243, Vol. II.

यशोदस्य मारणम् ।

प्रथमोविधिः ।

द्वितीयजण्डे २४३ पृष्ठे सर्णमारणप्रकरणे अत्युर्योविधिः द्रष्टव्यः ।

*Incineration of Jasoda.*

*First process.*

See Process No. 4, page 247, Vol. II.

द्वितीयोविधिः ।

यशोदं लौहजे पात्रे द्रावयित्वा पुनर्धमेत् ।

सुतसे ऽस्मिन् क्षिपेन् निम्बपत्रमेकं तदुपरि ॥

घर्षणालौहदण्डेन वह्निस्तृतिष्ठति ध्रुवम् ।

यथा यथा भवेद् घृष्णिर्भस्मीभावस्तथा तथा ॥

भस्मीभूतं पृथक् कृत्वा पुनः पत्रेण घर्षयेत् ।  
 ग्रष्टव्यं यद्दत्स्तावद् यावत् सर्वं न हन्यते ।  
 क्वालितं तद् यथाविधिर्पत्रभूत्या विमुच्यते ॥  
 नेत्रयोगेषु सर्वेषु भस्मीभूतमिदं शुभम् ।  
 भक्षणे न प्रशस्तं तदंजनार्थं प्रयोजयेत् ॥

### Second process.

Zinc is to be kept in an iron pot over fire, and heated highly, even after it is melted. A leaf of nimba tree is then to be thrown upon the molten zinc, which is to be rubbed with the leaf by means of an iron rod. This is followed by the rise of flames upon the molten zinc and the incineration of a part of the metal at the spot where the rubbing is carried on. Fresh nimba leaves are to be applied and the rubbing is to be continued. Wherever there is rubbing, there is incineration. The part which is incinerated may be sifted out and the remaining part of the zinc again incinerated in the same way. The powder, thus prepared, should be freed from the ashes of the nimba leaves by being washed off with water. Zinc, thus incinerated, is found to be beneficial to eye-sight and may be used as a collyrium. It is not commendable for internal use.

### तृतीयोविधिः ।

यशोदं तच्चतुर्थांशपारदगन्धकान्वितम् ।  
 मर्दयेत् खल्वके सम्यक् कन्यानिम्बुरसैः पृथक् ॥

लेपयेत् तेन पत्राणि गजाहे पचयेत् पुटे ।  
एकेनैव पुटेनैवं यशोदं म्रियते खलु ॥

Third process.

Fine leaves of zinc are incinerated, if they are subjected to heat by Gajaputam for once only, after having been smeared with a paste made of kajvali (mercury and sulphur, combined in equal parts), one fourth in quantity of the zinc, rubbed separately with the juices of kanya and nimbu (lemon).

यशोदमारणस्य विध्यन्तराणि ।  
नागवझप्रकारेण यशोदमपि मार्यते ।  
तयोरेव प्रकारेण शोधनीयमपि हि तत् ॥३

Zinc may also be purified and incinerated in the same manner as vanga (tin) and sisaka (lead) \*.

यशोदस्यानुपानानि ।  
खर्जुरतंडुलीहिमै रक्तातिसारनाशकम् ।३  
विनाशयेज् ज्वरं चैव यशोदं मायुजं खलु ॥  
यमानिकालवंगाभ्यां युतं शीतज्वरं जयेत् ।  
शर्कराजाजिसंयुक्तमतिसारं वर्मिं तथा ॥  
पुराणधृतसंयुक्तं बेत्रहितकरं परम् ॥

\* अप्रे वझनागप्रकरणं द्रष्टव्यम् ।

• See page 102.

यशोदं प्रमेहं हन्ति ताम्बूलखरसेन हि ।  
अभिमन्थेनाभिकरं त्रिसुगन्धै खिदोषहृत् ॥

*Accompaniments of Jasoda.*

Jasoda cures dysentery, if taken with a *hima kashayam* (decoction prepared without the application of heat) of kharjura (dates), and tanduliya roots. If taken in this way, it also cures fever due to an excess of pittam. It cures fever accompanied with a sensation of coldness, if taken with jamani and lavanga. In diarrhoea and vomiting it should be used with sugar and jeera. It is beneficial to eye-sight, if used as a collyrium with old ghee (clarified butter). It cures spermatorrhoea and gonorrhoea, if taken with the juice of betel leaves. It increases power of digestion, if taken with the juice of agnimantha. It is a destroyer of all the doshas, if taken with the trisugandhi.

यशोदमस्मनो मात्रा ।

गुंजाद्वयं तु यशोदं तालेन भस्तिं खादेत् ।  
अन्यथा मारितं तत् तु यहीयान् मासमात्रकम् ।

*Doses of zinc.*

Dose of zinc, incinerated with orpiment, is 2 ractis a day. It is six ractis a day, if incinerated without orpiment.

सदोषयशोदस्य अवगुणः ।

अपकं यशोदं रोगान् प्रमेहाजीर्णमालतान् ।  
वमिं भ्रमिं करोत्येतच् छोधयेन् मारयेत् ततः ॥

*Evil effects of zinc, not properly incinerated.*

Zinc, not properly purified and incinerated, gives rise to the following diseases :—gonorrhoea, indigestion, flatulence, vomiting, and giddiness. It is therefore to be purified and incinerated properly.

यशोदविकारशान्तिः ।

बलाभयां सितायुक्तां सेवते यो दिनत्रयम् ।  
यशोदस्य विकारात् स मुक्तिमाप्नोति निश्चितम् ॥

*Remedy.*

A man is freed from the evil effects of bad zinc, if he takes for three days bala and haritaki mixed with sugar.

अथ वज्ञम् ।

वंगं रंगं शुक्रलोहं कुरुप्प्यं पिच्छटं तथा ।  
त्रपु च त्रपुसं चैव त्रपुषमपि कथ्यते ॥  
खर्णजं नागजीवनं मृदुर्गं गुरुपत्रकम् ।  
चक्रसंज्ञं तमरञ्च नागजं कस्तीरं तथा ॥

आलीमकं सिंहला च स्ववेतं च तथा पुष्टम् ।  
हिमं च पूतिगन्धं च संगरमपि कथ्यते ॥

अस्य मेदः ।

खुरकं मिश्रकं चेति द्विविधं वङ्गमुच्यते ।  
खुरं तत्र गुणैः श्रेष्ठं मिश्रकं न हितं मतम् ॥  
धवलं मृदुलं स्तिर्गं द्रुतद्रावं सगौरवम् ।  
निःशब्दं खुरवङ्गं स्यान्मिश्रकं श्यामशुभ्रकम् ॥

VANGA (tin).

*Its varieties.*

There are two kinds of tin, viz. khuraka and mishraka. The former is better than the latter which is unfit for use in medicine. Khuraka is white, soft, soothing, and capable of being melted quickly. It is heavy and melts without any noise. The mishraka variety is blackish white in colour.

अस्य गुणाः ।

( १ )

वङ्गं तिक्तोष्णाकं रुद्धमीषद्वातप्रकोपनम् ।  
मेहश्लेष्मामयप्रश्च मेदोप्त्रं क्रिमिनाशनम् ॥  
पाण्डुश्वासविनाशनं पित्तलं च सरं लघु ।  
चक्षुष्यं लेखनं वृष्यं विशेषान् मेहनाशनम् ॥

*Its properties.*

( 1 )

Tin is bitter, warm, coarse, and a little increaser of vayu. It cures spermatorrhœa, phlegm, obesity, worms, anemia, and asthma. It is laxitive, light, improver of eye-sight, nutritious, reducer of fat, and a special curer of spermatorrhœa.

( 2 )

बल्यं दीपनपाचनं रुचिकरं प्रज्ञाकरं शीतलम् ।  
सौन्दर्यर्थस्य विवर्जनं हृतजरं नीरोगताकारकम् ॥  
धातुस्थैर्यकरं क्षयक्षयकरं सर्वप्रमेहापहम् ।  
वंगं भक्षयतो नरस्य न भवेत् स्वप्नेऽपि शुक्रक्षयः ॥

( 2 )

Vanga, duly incinerated, is an increaser of strength, power of digestion of food, appetite, intelligence, and beauty. It produces a cooling effect on the system. Duly taken, it does away with senility, diseases, and waste. It makes the dhatus stable, and cures all sorts of pramehas. Taken regularly, it prevents the nocturnal emission of semen.

अस्य शोधनम् ।

प्रथमोविधिः ।

द्रावयित्वा निशायुक्ते क्लिसं निर्गुणिडकारसे ।  
विशुद्ध्यति त्रिवारेण खुरवङ्गं न संशयः ॥

### First process.

Tin is purified, if it is melted for 3 times, and immersed each time in the juice of nigrundi, mixed with powdered haridra (turmeric).

द्वितीयोविधिः ।

अम्लतक्रविनिक्षिप्तं वर्षाभूविषतिन्दुभिः ।  
कट्टलावुगतं वङ्गं द्रावितं परिशुद्ध्यति ॥

### Second process.

Tin is purified, if it is melted with punarnava, visha-tinduka, and katu-alabu, and immersed in sour butter milk.

तृतीयोविधिः ।

शुद्ध्यति नागवंगौ घोषावाराऽतपेऽपि मुनिसंख्यैः ।  
निर्गुण्डोरससेकैस्तन्मूलरजःप्रलेपैश्च ॥

### Third process.

Lead and tin are purified, if they are smeared for seven times with the juice of ghosha only or with the juice of nigrundi mixed with the powder of its roots, and dried in the sun, each time they are so smeared.

चतुर्थोविधिः ।

त्रिपु मूत्रवर्गेऽम्लवर्गे वहूनां जले द्वारतोये च  
वज्रार्कदुर्घे ।  
ततः द्वालयित्वा कदंबस्य नीरे शुभं द्वालयेत्  
तसकं सप्तवारैः ॥

### Fourth process.

Vanga is purified, if it is heated and immersed, after each act of heating, in the following :—urines, amlas, juice of arka plant, solutions of ksharas, and milks of snuhi and arka. It is then to be again heated and washed off by means of decoction of kadamba leaves.

पञ्चमोविधिः ।

नागवज्ञे च गलिते रविदुग्धेन सेचिते ।  
त्रिवारैः शुद्धिमायातः सच्छद्दे हण्डिकान्तरे ॥

### Fifth process.

Sisaka (lead) and (tin) are purified in the following way :—Keep the metal (tin or lead) inside an earthen vessel, the lower part of which is full of pores, and heat the metal with a fire, made of char-coal, placed inside the vessel, which is to be kept upon a pot containing milk of arka. The metal, when melted, will fall through the pores. The process is to be performed for three times.

षष्ठोविधिः ।

यामाद्धं चूर्णसंयुक्ते दोलायन्त्रे हि स्वेदनात् ।  
वंगपत्रं विशुद्धति सूक्ष्मीकृतं न संशयः ॥

### Sixth process.

Thin leaves of vanga are purified by being boiled for one and half hour by means of the Dola Jantram containing lime water.

अस्य मारणम् ।

प्रथमोविधिः ।

सतालेनार्कदुग्धेन लिप्त्वा वङ्गदलानि च ।  
बोधिचिञ्चात्वचः क्षारैर्दद्याङ्गघुपुटानि च ।  
मर्द्यित्वा चरेऽस्म तद्रसादिषु कीर्तितम् ॥

*Incineration of tin.*

**First process,**

Leaves of tin are to be smeared with haritala and milk of arka and then subjected to Laghu-putam with the ashes of bodhi (called 'bauri' in Bengal) and chincha (tamarind).

द्वितीयोविधिः ।

प्रद्राव्य खर्परे वङ्गं षोडशांशं रसं छिपेत् ।  
स्वल्पस्वल्पालकं दत्त्वा भारद्वाजस्य काष्ठतः ।  
मर्द्यित्वा चरेऽस्म तद्रसादिषु कीर्तितम् ॥

**Second process.**

Melt some purified banga in an earthen pot placed over fire, and put upon it one sixteenth its weight of mercury. Then put a little purified haritala, every now and then, upon the compound which is to be frequently rubbed by means of a stick made of vanya karpasa wood, till the compound is reduced to ashes.

तृतीयोविधिः ।

पलाशद्रवयुक्तेन हरितालेन लेपितम् ।  
म्रियते वंगपत्रं हि पुटेन नात्र संशयः ॥

### Third process.

Leaves of vanga are reduced to ashes, if they are subjected to putam after having been smeared with haritala rubbed with the juice of palasha.

चतुर्थोविधिः ।

भल्लाततैलसंलिप्तं वङ्गं वस्त्रेण वेष्टितम् ।  
चिञ्चापिप्पलपलाशकाष्ठामौ याति पञ्चताम् ॥

### Fourth process.

Vanga is reduced to ashes, if it is heated by fire made of chincha, palasha, and pippala wood, after having been mixed with oil or essence of bhallataka and wrapped with a piece of cloth.

पञ्चमोविधिः ।

अर्कदुग्धेन संपिण्ठं सतालं पुटसप्तकैः ।  
वंगं हि म्रियते शुष्काश्वस्थबल्कलवेष्टितम् ॥

### Fifth process.

Vanga is incinerated, if subjected to putam for seven times after having been mixed with haritala and rubbed with milk of arka plant, dry barks of

aswatha tree being placed on all sides of the vanga, while confined within the samputam.

षष्ठोविधिः ।

विशुद्धवङ्गपत्राणि द्रावयेद्धण्डकान्तरे ।  
 अपामार्गोऽङ्गवं चूर्णं तततुल्यं तत्र मेलयेत् ॥  
 स्थूलाग्रया लौहदब्या शनैस्तदभिमद्येत् ।  
 यावद् भस्मत्वमाप्नोति तावन्मद्यन्तु पूर्ववत् ॥  
 ततस्त्वेकोक्तुं चूर्णं कृत्वा चाङ्गारवज्जिर्जतम् ।  
 नूतनेन शरावेण रोधयेत् भिषग्वरः ।  
 पश्चात्तीव्राग्निना पकं वङ्गं भस्म भवेद् ध्रुवम् ॥

### Sixth process.

Purified leaves of vanga are to be melted in an earthen vessel, placed over fire, and an equal quantity of ashes of apamarga is to be mixed with the melted vanga. The whole thing is to be rubbed quickly by means of the thick end of an iron rod, till the whole thing turns into ashes, which are next to be freed from powdered charcoal, and again subjected to a very strong heat by putam. This results in the incineration of the vanga.

सप्तमोविधिः ।

वंगं खर्परके कृत्वा तुल्लयां संस्थापयेत् सुधीः ।  
 द्रवीभूते पुनस्तस्मिन् चूर्णान्येतानि दापयेत् ॥

प्रथमं रजनीचूर्णं द्वितीयं च यमानिका ।  
 तृतीयं जीरकं चैव ततश्चिश्चात्वगुदभवम् ॥  
 अश्वत्थबल्कलोत्थं च चूर्णं तत्र विनिःक्षिपेत् ।  
 चालयेदविरामं तल्लौहदव्यां च स्वर्परे ॥  
 एवं विधानतो वंगं म्रियते नात्र संशयः ।  
 चूर्णाणि भस्मीभूतानि चालयेदवारिणा ततः ॥

### Seventh process.

Vanga is to be placed over fire in an earthen pot. When it melts, the following powders are to be placed upon it, the whole thing being turned constantly by means of an iron ladle :—turmeric, jamani, jeera, chincha bark, and aswatha bark—all of these finely powdered. The whole thing is thus reduced to ashes. The ashes of the powders are then to be washed off by means of water, leaving the white powders of vanga deposited at the bottom.

अष्टमोविधिः ।

माक्षिकं हरितालञ्च पलाशस्वरसेन च ।  
 पिष्ठा कल्केन संलिप्य वज्रपत्राणि मारयेत् ॥

### Eighth process.

Vanga is incinerated, if it is subjected to heat by putam after having been smeared with a paste made

of makshika, and haritala, duly rubbed with the juice of palasha leaves.

### नवमोविधिः ।

नागवच् छोधयेद् वंगं तद्वदश्वप्थचिञ्चयोः ।  
 सद्भस्म हरितालं च तुल्युमस्लेन केनचित् ॥  
 पलाशोत्थद्रवैर्वाथ लिसू । वङ्गं पचेत् पुटे ।  
 उद्धृत्य दशमांशेन तालेन सह मर्दयेत् ॥  
 पूर्वद्रावैः सहालोड्य रुद्धा । गजपुटे पचेत् ॥  
 तद्विंशतिपुटैः पक्षं मृतं भवति भस्मसात् ॥

### Ninth process

Both vanga and sisaka(lead) may be purified in the same way, and both may be incinerated in the following way :—Ashes of aswatha and chincha and an equal quantity of haritala are to be rubbed with a sour-non-metallic juice or with the juice or decoction of palasha leaves. Vanga or sisaka is to be smeared with this paste and heated by putam. When cooled, the whole thing is to be taken out of the putam, rubbed again with one tenth its weight of haritala and the liquid referred to above, and then subjected to heat by putam. Twenty such putams are to reduce the vanga (or sisaka) into ashes.

द्वितीयोऽध्यायः ।

१११

इशमोविधिः ।

वंगपादेन सूतेन वज्ञपत्रं विलेपयेत् ।  
शिरीषरजनीचूर्णं कुमार्याः सह पेषयेत् ॥  
सूतलिसं वज्ञपत्रं तत्कलकेन विलेपयेत् ।  
चिंचावृक्षस्य संगृह्य चान्तश्छन्नं च तण्डूलैः ॥  
पिष्टा तत् पिण्डमध्ये तु वंगपत्रं च रक्षयेत् ।  
रुद्धं गजपुटे पकं विंशत्या म्रियते पुटैः ॥

Tenth process.

Leaves of vanga are to be smeared with one fourth their weight of mercury, and then with a paste made of bark of shirisha, turmeric, and juice of kanya. They are then to be put inside a paste made of rice and tamarind seeds, and then heated by putam. Twenty such putams result in the incineration of the vanga.

एकादशोविधिः ।

मृतपात्रे द्राविते वज्ञे द्विपेत् तत्र सुवर्चिकाम् ।  
घर्षयेत् लौहदब्यां तु यावत् तस्मात् तनुनपात् ।  
निःसूत्य प्रदहेत् सर्वं स्वांगशीतलमुद्धरेत् ।  
सुवर्चिकापनोदार्थं सलिलैः द्वालयेन मुहुः ॥  
ततोऽतिनिर्मलं याह्यं वज्ञभस्म मनीषिणा ।  
अथ भस्मसमं तालं द्विसूख्लेन विमर्दयेत् ॥

ततो गजपुटे पक्त् । पुनरस्लेन मर्दयेत् ।  
 तालेन दशमांशेन याममेकं ततः पुटेत् ॥  
 एवं दशपुटैः पक्तं वंगं भवति मारितम् ।

### **Eleventh process,**

Tin melted in an earthen pot, kept over fire, is to be rubbed, by means of an iron ladle with salt petre, gradually put upon it, till fire comes out of it and burns the whole thing. Upon the fire being put out and the pot with its contents being cooled of itself, the ashes of tin are to be freed from those of salt-petre by means of water. The ashes, thus prepared, with an equal quantity of haritalam, are to be rubbed with a sour vegetable juice, and subjected to heat by Gaja-putam. The product with one tenth its weight of haritalam is again to be rubbed with a sour vegetable juice, and again subjected to heat by putam. Ten such acts of putam will kill the tin out-right.

दादशोविधिः ।

माक्षिकं हरितालं च पलाशस्वरसेन च ।  
 पिष्ठा कल्केन संलिप्य वंगपत्राणि मारयेत् ॥

### **Twelfth process.**

Vanga is incinerated, if it is subjected to heat by putam, after having been smeared with a paste made of swarna-makshika, haritala, and juice of palasha.

त्रयोदशोविधिः ।

तालकैः कर्कटास्थिभिः शंखशुक्तिवराटकैः ।  
सिन्धुकर्पूरसंयुक्तं मारयेद् वंगपत्रकम् ॥

### Thirteenth process.

Leaves of vanga are incinerated by means of haritala, rock-salt, camphor, shells of crab, conch, oyster, and cowrie. [This may be effected in one of these two ways :—(1) Molten vanga may be roasted with the powder of the things specified, the ashes of which may be washed away afterwards, or (2) Leaves of vanga may be heated by pūtam after having been smeared with a paste of the things specified.]

चतुर्दशोविधिः ।

अन्नं भस्त्राततोयेन पिष्टा वंगं विलेपयेत् ।  
ततस्तिलखलिमध्ये रुक्षा । तत्त्वं पुटे पचेत् ।  
गजारूप्यैर्जायिते भस्मं चत्वारिंशतप्रसंख्यकैः ॥

### Fourteenth process.

Vanga is incinerated, if it is heated by Gaja putam for forty times, after having been smeared each time with a paste made of bibhitaki and decoction of bhallataka and covered on all sides by means of sesamum cakes.

वंगकल्पः ।

वंगभस्म समं कान्तं व्योमभस्म च तत्समम् ।  
 मर्दयेत् कनकाम्भोभिर्निम्बपत्ररसैरपि ॥  
 दाढिमस्य मयूरस्य रसेन च पृथक् पृथक् ।  
 भूपालावर्त्तभस्माऽथ विनिःक्षिप्य समांशकम् ॥  
 गोमूत्रकशिलाधातुजलैः सम्यग् विमर्दयेत् ।  
 ततः गुग्गुलुतोयेन मर्दयित्वा दिनाष्टकम् ॥  
 विशोष्य परिचूर्ण्याऽथ समभागेन योजयेत् ।  
 भृष्टबब्धूरनिर्यासैराकुलीबीजचूर्णकैः ॥०  
 ततः क्षिपेत् करंडान्तर्विधाय पटगालितम् ।  
 गोतकपिष्ठरात्रीणां सारेण सह दापयेत् ।  
 धातुपुष्टिकरं चैतत् प्रमेहकुलनाशनम् ॥

*Vanga-kalpa.*

Tin, kanta iron, and mica—all equal in quantities and reduced to ashes, are to be rubbed with the juices of leaves of kanaka dhutura, nimba, pomegranate, and apamarga, respectively and separately. Incinerated rajavarta,\* equal in quantity to the tin, is then to be mixed with the compound, referred to above, and the whole thing is to be rubbed well with cow's urine, and shila-jatu dissolved with water.

\* घृष्टं बन्धूकनिर्यासैर्नाकुलीबीजचूर्णकैः । इत्येतत् पाठान्तरम् ।

\* See chapter on gems in the present volume.

The product is then to be rubbed for eight days with guggulu (duly purified by means of being boiled in a Dola-Jantram with the decoction of guruchi, dashamuli, or triphala), dissolved with water. It is then to be dried, powdered, and mixed with an equal quantity of gum of babbula (acacia), fried by heat and reduced to powder, and with the same quantity of the powder of akuli (nirmali) seeds. The whole thing is then to be finely powdered and sifted by means of a piece of cloth and kept carefully. This medicine cures all sorts of meha and prameha, if taken with the juice of turmeric, pestled with butter-milk (prepared from cow's milk).

चतुर्भिर्वृक्षकैस्तुल्यमेतद् वंगं रसायनम् ।  
 निश्चितं तेन नश्यन्ति मेहा विंशतिभेदकाः ॥  
 शालयो मुहूर्गसूपं च नवनीतं तिलोऽन्नम् ।  
 पटोलं तिक्ततुंडीरं तक्रं पञ्चाय शुस्यते ॥

This preparation of vanga, taken in doses of 12 ractis a day, serves as a destroyer and preventer of senility. It also cures all sorts of diseases relating to the semen. The following diet should be taken by the user of the preparation :—shali rice, juice of mudga pulses, butter, sesamum oil, patola, gopala-karkati, and butter milk.

वंगस्य अनुपानानि ।

कर्पूरेण युतं वंगं मुखगन्धविनाशनम् ।  
 जातिफलेन संयुक्तं पुष्टिकृच्छुक्रधारणम् ॥  
 तुलसीपत्रतोयेन प्रमेहस्य विनाशनम् ।  
 घृतेन पाण्डुरोगजित् टंकणैर्गुर्लमनाशकम् ॥  
 हरिद्रियाम्लपित्तम् मधुना बलवृद्धिकृत् ।  
 सितोपलेन पित्तम् ताम्बूलैः शुक्रबन्धनम् ॥  
 पिप्पल्या वह्निमान्यम् निशया चोद्धश्वासहृत् ।  
 चम्पकस्वरसेनैव गात्रगन्धं विनाशयेत् ॥  
 निम्बस्य स्वरसेनाद्यं देहदाहप्रशान्तये ।  
 कस्तूरीसहितं वंगं वातम् वीर्यरोधकृत् ॥  
 खदिरकाथयोगेन चर्मरोगं जयेदिदम् ।  
 पूगफलस्य सार्धेनाजीर्णं विनाशयेत् चणात् ॥  
 नवनीतसमायुक्तमस्थिजैरर्थं जयेदिदम् ॥  
 दद्यात् पुष्टिं समं दुग्धैः भंगादिना हि स्तम्भनम् ।  
 रसोनैर्वातजां पीडां नाशयेन्नात्र संशयः ॥  
 समुद्रफलसंयुक्तनिर्गुर्णहीस्वरसैः सह ।  
 कुष्ठं नाशयते क्षिप्रं सिंहनादो मृगानिव ॥

अपामार्गस्य मूलेन षण्ठत्वं नाशयेद् ध्रुवम् ।  
 देवपुष्पसमायोगात् समुद्रफलयोगतः ।  
 नागपत्ररसैर्लिसं शिश्रवृद्धिकरं परम् ॥  
 गोरोचनलवंगेन तिलको मोहनं भवेत् ।  
 एरण्डमूलिकायोगाद् घर्षयित्वा च वंगक्रम् ॥  
 ललाटे लेपनाच्चैव शीर्षगदः प्रशास्यति ॥  
 कौब्जेऽपामार्गमूलेन स्त्रीहि टंकणसंयुतम् ।  
 रसोनतैलयुडः नस्यमपस्मारनिसूदनम् ॥  
 पुत्राप्त्यै रासभीक्षीरैस्तक्राद्यं वातगुल्मनुत् ।  
 यमानिकायुतं वाते वाजिगन्धायुतं तु वा ॥  
 जलोदरे त्वजाक्षीरसंयुतं गुणकृद् भवेत् ।  
 जातिफलाश्वगन्धाभ्यां कटिपीडानिवारणम् ॥

*Accompaniments of vanga.*

Vanga cures bad smell coming out of the mouth, if taken with camphor. It is nutritious and retainer of semen, if taken with jatiphala. In diseases relating to the semen, it is to be used with the juice of tulashi leaves. It is to be used in anemia with clarified butter ; in gulma with tankanam ; in amlapittam (acidity and biliary) with haridra ; for increase of strength with honey ; in an excess of

pittam with sugar-candy ; for an increase of semen, with juice of tambula (betel leaves) ; in loss of digestive power, with pippali ; in asthma or gasping, with haridra ; with juice of champaka flower, in bad smell coming out of the body ; with juice of nimba leaves in inflammation of the body ; with musk, in diseases due to an excess of vayu ; with juice of khadira in skin diseases ; with betel nuts in indigestion ; with butter in the decay of bones ; with milk for nourishment ; with bhanga (bhang), etc., for retention of semen ; with the juice of rasona (garlic), in diseases due to vayu ; in leprosy with samudra fruit mixed with the juice of nirgundi ; with the root of apamarga, in impotency ; for increase of growth of the penice, it should be used as a paste with lavanga, samudra fruit, and juice of betel leaves. It produces a sort of hypnotising power in the man who uses it as a *tilaka* (a mark with sandal paste, etc., on the forehead). It cures head diseases, if applied on the forehead as a paste made with eranda roots and water. It is to be used with apamarga roots in hunch-backedness ; with tankanam in enlargement of spleen. It cures hysteria, if used as a snuff with rasona and sesamum oil. It is to be used with the milk of ass for the purpose of conceiving or begetting a male child : with butter-milk in gulma due to an excess of vayu ; with jamani or ashwagandha, in diseases due to an excess of vayu ; with goat's milk in dropsy ; and with jatiphala and ashwagandha in sciatica.

शोधनमारणहीनवङ्गस्य अवगुणाः ।

( १ )

पाकेन हीनः खलु वंगकं हि कुष्ठानि गुल्मानि  
बहूंश्च रोगान् ।

पारादुप्रमेहापच्चिवातरक्तं बलापहारं कुरुते नराणाम् ॥

*Evil effects of vanga, not properly purified and incinerated.*

( १ )

Vanga, not properly purified and incinerated, gives rise to various diseases such as leprosy, gulma, anemia, spermatorrhœa and gonorrhœa, scrofula, vata-racta (leprosy of a mild type), and loss of strength.

( १ )

वंगं विधत्ते खलु शुद्धिहीनमादेपकम्पौ च किलास-  
गुल्मौ ।

कुष्ठानि शूलं किल वातशोथं पारादु प्रमेहञ्च  
भगन्दरञ्च ॥

विषोपमं रक्तविकारवृन्दं दयञ्च कुच्छानि कफज्वरञ्च ।  
मेहाश्मरीविद्रधिमुष्करोगान् नागोऽपि कुर्यात्  
कथितान् विकारान् ॥

( २ )

Vanga as well as sisaka, not properly purified and incinerated, gives rise to the following :—spasm, shivering, kilasha, gulma, kustha, colic, dropsy,

anemia, prameha, fistula, impurities of the blood, phthisis, obstinate fever due to an excess of kapha, stone disease, and tumour.

वंगविकारशान्तिः ।

मेषशृङ्गीसितायुक्तां सेवते यो दिनत्रयम् ।  
वंगदोषविमुक्तोऽसौ सुखं जीवति मानवः ॥

*Remedy.*

A man is freed from the evil effects of vanga, prepared improperly, if he takes for three days mesha-shringi (powder or decoction) with sugar or sugar-candy.

अथ नागम् ।

सीसं ब्रधं च वप्रं च योगेष्टं सीसकं नागम् ।  
कुवंगं च कुरंगं च द्विरदसर्पनामकम् ॥

सीसकस्य गुणाः ।

( १ )

सीसं रंगगुणं ज्ञेयं विशेषान् मेहनाशनम् ।  
सतिक्कमधुरो नागो मृतो यदा तु भस्मसात् ।  
आयुःकीर्तिवीर्यवृद्धिं करोति सेवनात् सदा ॥

*Sisaka (Lead)*

Its properties.

( १ )

The properties of lead are similar to those of tin. It is especially efficacious in diseases affecting the semen. It is bitter and sweet in taste.

( २ )

नागस्तु नागशततुल्यबलं ददाति  
व्याधिं विनाशयति जीवनमातनोति ।  
वह्निं प्रदीपयति कामबलं करोति  
मृत्युं च नाशयति सन्ततसेवितः सः ॥

( २ )

When incinerated, it increases longevity, semen, power of digestion of food, and procreative energy, if taken regularly and for a long time.

( ३ )

अत्युष्णं सीसकं ह्लिघ्नं तिक्तं वातकफापहम् ।  
प्रमेहतोयदोषघ्नं दीपनं चामवातनुत् ॥

( ३ )

Lead produces a very hot sensation in the system. It is soothing, bitter in taste, destroyer of vayu, kapha, prameha, and rheumatism, and increaser of power of digestion.

( ४ )

सतिक्तमधुरो नागो तारस्य रञ्जनो परः ।  
स्मृत्यायुर्वीर्यवर्ज्ञनं करोति सेवनात् सदा ॥

( ४ )

Lead is bitter and sweet in taste. It is a good dyer of silver. By constant use, it increases memory, longevity, and semen.

( ५ )

क्षयपवनविकारे गुलमपाण्डामयेषु ।  
 ऋमकृमिकफशूले मेहकासामयेषु ॥  
 प्रहणीयुदगदे वै नष्टवह्नौ प्रशस्तः ।  
 शुभविधिकृतनागः कामपुष्टिं ददाति ॥

( ५ )

Lead, incinerated in the best way prescribed, is efficacious in phthisis, diseases due to vayu, gulma, anemia, giddiness, worms, colic due to an excess of phlegm, spermatorrhœa, chronic diarrhœa, diseases affecting the rectum, and loss of the power of digestion. It also serves as an aphrodisiac.

शुद्धसीसस्य परीक्षा ।  
 द्रुतद्रावं महाभारं छेदे कृपणं समुज्ज्वलम् ।  
 पूतिगन्धं बहिः कृष्णं शुद्धसीसमतोऽन्यथा ॥

*Test of lead free from alloy.*

Lead is to be regarded free from alloy, if it melts quickly, weighs heavy, and presents a black and bright sectional surface at the place where it is cut into two pieces.

धंस्य शोधनम् ।

प्रथमोविधिः ।

निर्गुणडीमूलचूर्णेन चार्कदुग्धेन लेपयेत् ।  
 नागपत्रं परिशुष्कं द्रावयित्वा निषेचयेत् ॥

निर्गुण्डीद्रवमध्ये तु ततः पर्त्र तु कारयेत् ।  
लिस् ॥ भाव्यं पुनः सेच्यं सप्तवारं विशुद्धये ॥

*Purification of Lead.*

Lead is purified, if it is made into leaves, smeared with powdered nirgundi roots rubbed with milk of arka, and then dried, melted, and immersed into the juice of nirgundi, the process being performed for seven times.

द्वितीयोविधिः ।

निशा तु म्बुरुषीजानि कोकिलाक्षं कुठारिका ।  
गौरीफलाम्लिका चण्डी कूदब्राह्मी च जीरकम् ॥  
यथालाभेन भस्मैषां वज्रीक्षीरेण भावयेत् ।  
तन्मध्ये निहितं नागं शुद्धैय स्वेद्यं तु सप्तधा ॥

*Second process.*

Leaves of lead are purified, if they are smeared with a paste made of the milk of snuhi and the ashes of as many as available of the following, and then heated for seven times, after having been smeared with the paste each time :—haridra, green dhanya seeds, kokilaksha, kootharika, amalaki, chincha, red-rose, small brahmi, and jeera.

तृतीयोविधिः ।

घोषारनागवंगं हि तापितं सप्तवारतः ।  
निर्गुण्डीरसमध्ये तु विशुद्धते निमज्जितम् ॥

### Third process.

Bell-metal, brass, lead, and tin are purified by heating and immersing them into the juice of nirgundi for seven times.

चतुर्थविधिः ।

सिन्दुवारजटाकान्तीहरिद्राचूर्णकं द्विपेत् ।  
द्रुते नागेऽथ निर्गुण्ड्यास्त्रिवारं निद्विपेद् रसे ।  
नागः शुद्धो भवेदेवं मूच्छास्फोटादि नाचरेत् ॥

### Fourth process.

Powdered root of nirgundi, barahi-kanda, and haridra are to be thrown into molten lead which is then to be immersed into the juice of nirgundi for three times (after having been melted each time). Lead, thus purified, does not give rise to hysteria, boils, etc.

पञ्चमोविधिः ।

गलिते नागवङ्गे च द्विते सच्छिद्वे खर्परे ।  
निषेचिते रवेदुग्धे त्रिवारेण विशुद्ध्यति ॥

### Fifth process.

Lead as well as tin is purified, if it is melted for three times and immersed each time through an arthen pot full of pores, into the milk of arka.

षष्ठोविधिः ।

नागवङ्गौ विगलितौ त्रिधा त्रिधा निषेचयेत् ।  
तैले तक्रे च काञ्जिके कषाये च कुलत्थजे ।  
रविदुग्धे विशेषेण तयोरेव विशुद्धये ॥

Sixth process.

Lead as well as tin is purified, if it is immersed for three times in each of the following, after having been melted each time :—oil, butter-milk, kanji, decoction of kulattha, and especially, milk of arka plant.

सप्तमोविधिः ।

फलत्रिकजकषाये वा कुमारीरसे वा  
करिवरसलिले वा गालयेत् सप्तवारम् ।  
खदिरदहनतसं लौहपात्रस्थितं स्यात्  
तदनु सपदि नागः जायते शुद्धभावः ॥

Seventh process.

Lead is purified, if it is melted for seven times in an iron pot by a fire made of khadira wood and immersed each time either in the decoction of triphala, or in the juice of kanya, or in the urine of elephant.

अस्य मारणम् ।

प्रथमोविधिः ।

अश्वथचिंचात्वग्भस्म नागस्य चतुरंशतः ।  
क्षिप्त्वा चुल्ल्यां पचेत् पात्रे चालयेत् लौहयष्टिना ॥  
यावद् भस्म भवेत् तच्च भस्मतुल्यं मनःशिला ।  
जम्बोरैरारनालैर्वा पिष्टा रुद्धा पुटे पचेत् ॥

स्वांगशैत्यं पुनः पिष्टा विंशत्यंशैः शिलाम्लकैः ।  
एवं षड्भिः पुटैः पाको नागं कुर्यात् निरुत्थितम् ॥०

*Incineration of Lead.*

First process.

Leaves of lead are to be roasted with one fourth their quantity of the ashes of the barks of aswattha and chincha, in an iron cauldron, turned by an iron rod, till the whole thing turns into ashes. These ashes are to be rubbed with an equal quantity of manas-shila and lime juice or aranala and subjected to heat by putam. When cooled of itself, the contents of the putam are to be taken out and subjected to heat by putam for six times, after having been rubbed each time with one twentieth their weight of manas-shila and a sufficient quantity of a sour vegetable juice.

द्वितीयोविधिः ।

अथवा नागपत्राणि चूर्णलिसानि खर्परे ।  
अत्यमौ पाचयेद् यामं तद्भस्म चित्रकद्रवैः ॥  
भर्जयेल् लौहजे पात्रे चालितं पार्थदरडकैः ।  
यामषोडशपर्व्यन्तं द्रवो देयः पुनः पुनः ॥  
पाकान्ते सर्वमुदधृत्य मर्दयेच्चचित्रकद्रवैः ।  
गोलयित्वा विमारयेत् षड्भिर्लघुपुटैश्च तद् ॥

\* षड्भिः पुटैः इत्येतस्य स्थले षष्ठिपुटैः इत्येतत् पाटान्तरं द्रष्टव्यम् ।

**Second process.**

Leaves of lead are to be smeared with a sufficient quantity of slaked lime and heated in an earthen pot by a very strong heat for three hours. The ashes, thus prepared, are to be roasted with a decoction of chitraka roots for forty eight hours, being turned all the while by means of a branch of an arjuna tree, fresh decoction being poured into the vessel every now and then. The ashes are next to be subjected to heat by *laghuputam* for six times, after having been rubbed each time with a decoction of chitraka roots.

तृतीयोविधिः ।

चिंचाकेकुभस्तबलावज्जलताभवैः ।  
अपामार्गर्जुनाश्वत्थभस्मभिर्जयेद् दृढम् ॥  
ससाहं नागपत्रकं नियतं परिचालितम् ।  
पलाशतरुदण्डेन म्रियते नात्र संशयः ॥

**Third process.**

Leaves of lead are incinerated, if they are fried steadily in an iron cauldron with the ashes of chincha, bibhitaki, ikshu (sugar-cane), bhallataka, bala, asthisanhara, apamarga, arjuna, and aswattha, for seven days continuously, being turned constantly all the while by means of a palasha rod.

चतुर्थोविधिः ।

कुनटी मान्द्रिकं चैव समभागं तु कारयेत् ।  
अर्कपर्णेन तत् पिष्टा सीसत्राणि मारयेत् ॥

#### Fourth process.

Leaves of lead are incinerated, if they are subjected to heat by putam after having been smeared with a paste made of an equal quantity of manasila and makshika, rubbed with the juice of arka leaves.

पञ्चमोविधिः ।

हतमुत्थापितं सीसं दशवारेण सिद्ध्यति ।  
तन्मृतं सीसकं सर्वदोषमुक्तं रसायनम् ॥ \*

#### Fifth process.

Lead, killed and revived for ten times, is to be killed once more. The ashes, thus obtained, are freed from all defects and serve as a medicine which prevents and cures senility.

षष्ठोविधिः ।

शिलया रविदुर्घेन नागपत्राणि लेपयेत् ।  
मारयेत् पुटयोगेन निरुत्थं जायते तथा ॥

\* धातूनामनिश्चयं भस्म केनचिद्मलरसेन साढ़ मर्दितं ध्यापितं च पूर्वाकारमवाप्नुयात् । यथा हि—क्षारा मुखकरा: सर्वे सर्वेहम्ला: प्रबोधकाः ।

**Sixth process.**

Leaves of lead are incinerated absolutely, if they are subjected to heat by putam after having been smeared with manas-shila, rubbed with the milk of the arka plant. Such ashes are rendered incapable of being restored to their original condition.

सप्तमोविधिः ।

त्रिभिः कुम्भिपुटैर्नागो वासारसविमर्द्धिः ।  
सशिलो भस्मतामेति तद्रजः सर्वमेहनुत् ॥

**Seventh process.**

Lead is incinerated, if it is rubbed with the juices of kumbhi (a kind of water plant), vasaka leaves, and manas-shila, and then subjected to heat by putam for three times.

अष्टमोविधिः ।

एकोभागोऽहिफेनस्य नागभागचतुष्टयम् ।  
घर्षणान् निम्बकाष्ठेन मन्दवहिप्रदानतः ।  
नागभूतिर्भवेत् सिता वीर्यदात्यकरी मता ॥

**Eighth process.**

Four parts of lead and one part of opium are to be heated together by a mild heat, and rubbed continuously, while heated, by a rod made of nimba wood. This results in the reduction of the lead to white powder, which, taken in proper doses, strengthens semen.

नवमोविधिः ।

कुड्वं नागपत्राणां कुनत्याः स्यात् पलाञ्चकम् ।  
 तरण्डुलीयरसैर्यामं यामं वासारसैस्तथा ॥  
 संमध्यं चक्रिकां कृत्वा घर्मे संशोष्य तां पुनः ।  
 शरावसंपुटे कृत्वा पचेहु वन्योपलैर्भिषक् ॥  
 एवं सप्तपुटैर्नागो भस्मीभवति निश्चितम् ।  
 द्विगुंजोऽयं ध्रुवं हन्यात् प्रमेहानखिलान् गदान् ॥

### Ninth process.

Sixteen tolas of leaves of lead and two tolas of manas-shila are to be rubbed for three hours each with the juices of tanduliyaka and vasaka, and made into cakes which are to be dried in the sun and heated by putam. Performance of this process for seven times results in the incineration of the lead, which, taken in doses of two ractis a day (with honey and juice of turmeric, etc.) cures all sorts of prameha (gonorrhœa).

दशमोविधिः ।

नागं खर्परके निधाय कुनटीचूर्णं ददीत द्रुते ।  
 निम्बूत्थद्रवगन्धकेन पुटितं भस्मीभवत्याशु तत् ॥  
 एवं तालकवापतस्तु कुटिलं चूर्णाकृतं तत् पुटेत् ।  
 गन्धाम्लेन समस्तदोषरहितं योगेषु योज्यं भवेत् ॥

Tenth process.

Powdered manas-shila is to be mixed with lead, when melted in an earthen vessel. It is then to be powdered and subjected to heat by putam, after having been rubbed with sulphur and lemon juice. This results in the lead being reduced to ashes very soon. Powdered haritalam may be used in lieu of manas-shila.

एकादशोविधिः ।

( हरिद्रभस्म )

खर्पे तापितं नागं रविमूलेन घर्षयेत् ।  
यामत्रिकैर्भवेद्भस्म हरिद्रवर्णमदूषणम् ॥

Eleventh process.

Lead, heated in an earthen pot, is to be rubbed with the roots of arka plant for three hours, after which it is reduced to powder of a green colour.

द्वादशोविधिः ।

( पीतभस्म )

शिलागन्धकर्परं कुंकुमं मदेयेत् समम् ।  
जंबीरस्य द्रवैर्यामं तत्समं नागपत्रकम् ॥  
लिसू । लिसू । पुटे पाच्यं यावत् षष्ठिपुटं भवेत् ।  
तन्नागं विद्युयदाभासं जायते नात्र संशयः ॥

Twelfth process.

Leaves of lead are reduced to ashes of a yellowish colour, if they are subjected to heat by putam

for sixty times, after having been smeared each time with manas-shila, gandhaka, karpura, and kunkuma, all combined being equal in quantity to the lead, rubbed with lime juice for three hours.

त्रयोदशोविधिः ।

तिर्यग्कारचुल्लयां तु तिर्यग्वक्त्रघटं न्यसेत् ।  
 तं च वक्त्रं विना सर्वं गोपयेद् यत्ततो मृदा ॥  
 भृष्टयन्त्राभिधे तस्मिन् यन्त्रे नागं विनिक्षिपेत् ।  
 विनिपतिपलमात्रकमधस्तीव्रानलं क्षिपेत् ॥  
 द्रुते नागे क्षिपेत् सूतं शुद्धं कर्षमितं शुभम् ।  
 विघट्य निक्षिपेत् क्षारमेकैकं हि पलं पलम् ॥  
 अर्जुनस्याक्षवृक्षस्य महाराजगिरेष्वि ।  
 दाङ्गिमस्य मयूरस्य क्षिप्तः । क्षारं पृथक् पृथक् ॥  
 एवं विंशतिरात्रं वै पचेत् तीव्रेण वह्निः ।  
 विघट्यन् दृढं दोभ्यां लौहदव्यां प्रयत्नतः ॥  
 रक्तं तज्जायते भस्म कपोतच्छायमेव वा ।  
 नागं दोषविनिर्मुक्तं जायतेऽति रसायनम् ॥

Thirteenth process.

On an oven of slanting shape place a vessel which also is of slanting shape. All parts of the latter, except its mouth, are to be coated with mud. This apparatus is called the Bhrista Jantra.

Pour 20 palas of lead into this vessel, and heat it by a very strong fire. One tola of purified mercury is to be poured into the lead, when melted, the whole thing being rubbed by means of an iron rod. One pala of the kshara of each of the following is to be put, one by one, on the lead, and the rubbing is to be continued :—arjuna, vibhitaki, mango tree, pomegranate tree, and apamarga. The roasting is to be carried on in this way by a strong heat for 20 nights, resulting in the reduction of the lead into ashes of red colour or of a colour resembling that of a pigeon.

चतुर्दशोविधिः ।

तांबूलरससंपिण्ठः शिलालेपात् पुनः पुनः ।

द्वात्रिंशद्द्विः पुटैर्नागो निरुत्थो याति भस्मताम् ॥

#### Fourteenth process.

Lead is incinerated, if it is subjected to heat by putam for thirty two times, after having been smeared each time with a paste made of manas-shila, rubbed with the juice of tambula (betel leaves).

पञ्चदशोविधिः ।

( नागसिन्दूरः )

कुमारीपादघातेन तत्क्षणान् म्रियते फणी ।

पुटेन शतकेनापि सिंदूरः केवलं भवेत् ।

तारे ताम्रे तथा वंगे ततो वेधी भवेद् धूवम् ॥

## Fifteenth process.

Powdered lead is reduced to ashes of red colour, if it is subjected to putam for hundred times, after having been rubbed with the juice of the root of kanya each time it is so heated. Such ashes may transform silver, copper, and tin into gold.

बोडशोविधिः ।

( नागसिन्दूरः । )

भूनागागस्त्यपत्राणि पिष्टा पात्रं विलेपयेत् ।  
 वासापामार्गजं क्वारं तत्र नागयुतं क्षिपेत् ॥  
 चतुर्थांश्श्रमानेन वासादव्यर्था विघटयेत् ।  
 यामैकैन भवेद्भस्म वासकस्वरसान्वितम् ।  
 मर्दयेत् पुटयेच्चैव नागसिन्दूरकं हि तत् ॥

## Sixteenth process.

The inner surface of a pot is to be coated with a paste made of earthworms and leaves of vasaka. Into this vessel is to be placed some lead with one fourth its quantity of ksharas, prepared out of vasaka and apamarga plants (duly burnt, dissolved with water, filtered, and then dried). The vessel is then to be placed over fire and the lead with the ksharas to be turned constantly by a ladle made of the vasaka plant. This will result in the incineration of the lead, in course of three hours only. The ashes, thus prepared, are to be rubbed with the juice

of vasaka leaves, and subjected to heat by putam. They will thus assume the colour of red vermillion.

सप्तदशोविधिः ।

( नागसिन्दूरः । )

भुजंगममगस्त्यस्य पत्रं पिष्टा प्रलेपयेत् ।  
 तत्र संविद्रुते नागे वासापामार्गसंभवम् ॥  
 क्षारं वा मिथ्रयेत् तत्र चतुर्थांशं प्रयत्नतः ।  
 प्रहरं पाचयेच् चुल्लयां वासादव्यां च घट्टितम् ॥  
 तत उच्छ्रुत्य तच्चूर्णं वासानीरैविमह्येत् ।  
 पुटेत् पुनः समुच्छ्रुत्य तेनैव परिमह्येत् ॥  
 एवं सप्तपुटैर्नागः सिन्दूरो जायते ध्रुवम् ।  
 पादांशदरदेन च युक्तोऽयं जायते वरः ॥

### Seventeenth process.

Lead is to be smeared with a paste made of the leaves of vasaka. It is then to be melted and roasted for three hours with a decoction of vasaka and apamarga or one fourth its quantity of a kshara (alkali) prepared out of the ashes of vasaka and apamarga \*, a branch of a strong vasaka tree being used as a ladle to turn the preparation. The ashes are then to be subjected to putam for seven times, after having been rubbed each time with the juice of vasaka. The product is sindura or red vermillion.

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\* The process of preparation of ksharas will be described later in the present volume.

It gains in efficacy, if mixed with one fourth its quantity of hingula (duly purified).

अष्टादशोविधिः ।

( नागसिन्दूरः । )

पादांशागस्त्यभूनागलिसं नागं विशोषयेत् ।  
 तद्भारणे द्रावयेद् यत्ताद् दृढे भारणे विनिक्षिपेत् ॥  
 वासाचिञ्चिटयोः क्षारं वासादले विघटयेत् ।  
 यामैकं पाचयेच् चुल्यां समुदधृत्य विमिथयेत् ॥  
 तच्चूर्णं तु शिलाताप्यैर्वासकक्षारसंयुतैः ।  
 तच्च तुलयं पूर्वनागैरेकविंशतिधा पुटेत् ।  
 द्विपुटं चिञ्चिटाक्षारैर्देयं वासारसैः सह ।  
 नागं सिन्दूरवर्णाभं त्रियते सर्वकार्यकृत् ॥

### Eighteenth process.

Lead is to be dried after having been smeared with one fourth its quantity of vasaka leaves rubbed with earthworms. It is then to be melted and kept in a strong pot. Ksharas of vasaka and apamarga are to be rubbed with the leaves of vasaka and then heated for three hours by fire. These ksharas are to be mixed well with the lead (finely powdered). The powder, thus prepared, is to be subjected to heat by putam for 21 times, after having been mixed each time with manas-shila, swarnamakshika, and kshara of vasaka, these three combined being equal to the

original quantity of the lead. The product is again to be subjected twice to heat by putam after having been rubbed each time with the juice of vasaka. The product is red vermillion.

नागामृतम् ।

( १ )

पलद्वयं मृतं नागं हिंगुलं च पलद्वयम् ।  
 शिला कर्षमिता ग्राह्या सर्वतुलयं हि गन्धकम् ॥  
 निम्बुनीरेण संमर्द्य ततो गजपुटे पचेत् ।  
 तदा नागेश्वरोऽयं स्यान् नागराजसुतोपमः ।  
 ससूते मारिते नागे न देयं गन्धहिंगुलम् ॥

*Nectarization of lead.*

( १ )

Two palas of lead incinerated (without the help of mercury), an equal quantity of hingula, and one tola of gandhaka—all of these are to be rubbed with the juice of nimboo (lime fruit), and subjected to heat by Gaja putam. Thus treated, lead becomes very powerful.

( २ )

वैधं नागोऽहवं भस्म ताप्यभस्माद्भागिकम् ।  
 पादं पादं चिपेद्भस्म शुल्वस्य विमलस्य च ॥

कान्ताभ्रसत्त्वयोश्चापि स्फटिकस्य पृथक् पृथक् ।  
 सर्वमेकत्र संचूरार्य पुटेत् त्रिफलावारिणा ॥  
 त्रिंशद्दवनगिरिंडेश्च त्रिंशद्दवारं विमयं तत् ।  
 व्योषवेल्लकचूर्णैश्च समांशैः सह मेलयेत् ॥  
 मध्वाज्यसंहितं हन्ति प्रलोढं वल्लमात्रया ।  
 अश्च श्रीतिकात्तिष्ठाद् रोगान् धनुर्वातं विशेषतः ॥  
 कफरोगानशेषांश्च मूत्ररोगांश्च सर्वशः ।  
 श्वासं कासं द्वयं पागदुं श्रयथुं श्रीतिकाज्वरम् ।  
 सर्वानुदकदोषांश्च तत्तद्रोगानुपानतः ॥

( 2 )

Four parts of incinerated lead, two parts of swarna-makshika, and one part each of copper, vimala, kanta iron, essence of mica, and sphatika (quartz) \*—all of these are to be powdered together and subjected to heat by putam for 30 times, by means of a fire made of 30 pieces of cowdung cakes, found dried in the pasturage, after having been rubbed each time with decoction of triphala. The ashes, thus prepared, are to be mixed with an equal quantity of trikatu and biranga, finely powdered, and are to be taken in doses of one balla a day, duly mixed with a little of honey and clarified butter.

\* For incineration of quartz, see later in the chapter on gems.

It cures eighty different kinds of diseases due to an abnormal excess of vayu, and especially dhanus-stanbha (titanus), those due to an abnormal excess of phlegm, all sorts of urinary diseases, asthma, kapha, phthisis, anemia, dropsy, fever accompanied with a sensation of coldness, and hydrocele.

नागस्य अनुपानम् ।

मृतं नागं सितायुक्तं मायुं वायुं शिरोव्यथाम् ।  
नेत्ररोगं शुक्रदोषं प्रलापं प्रदाहं जयेत् ॥  
प्रददाति रुचिं कामं वर्द्धयेत् पथ्यसेविनः ।  
खबुद्धया कल्पयेद् धीमान्ननुपानं गदेषु च ॥

*Accompaniments of lead.*

Incinerated lead, if taken with sugar, can cure pittam, vayu, head-ache, eye-disease, diseases affecting semen, delirium, inflammation, loss of appetite, and loss of sexual desire, provided there is nothing to be objected to in the diet taken by the patient.

शोषनमारणहीननागस्यावगुणः ।  
कुषानि गुलमारुचिपाराहुरोगान् द्ययं कफं रक्त-  
विकारकृच्छ्रम् ।  
ज्वरास्मरीशूलभग्दराद्यं नागं त्वपकं कुरुते  
नराणाम् ॥

*Evil effects of lead, not properly purified  
and incinerated.*

Lead, not incinerated in the prescribed way, gives rise to leprosy, gulma, loss of appetite, anemia, phthisis, phlegm, troublesome impurities of the blood, fever, stone disease, colic, and fistula.

नागदोषशान्तिः ।

हेमा हरीतकीं खादन् सितायुक्तां दिनत्रयम् ।

अपक्लानागदोषेण विमुक्तः सुखमेधते ॥

*Remedy.*

One is freed from the evil effects of lead, not properly incinerated, if one takes incinerated gold with haritaki, (one fourth of a tola in weight), and sugar for three days.

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तृतीयोऽध्यायः ।

अथ मिश्रधातवः ।

अथ पित्तलम् ।

अस्य नामानि ।

पित्तलमारकूटश्च द्रव्यदारु रीतिस्तथा ।  
मिश्रश्च पतिकावेरः पिंगला पीतलोहकः ॥  
आरश्च कपिला च द्रसुवण्णं सिंहलं तथा ।  
पीतलकं च पीतकं पिङ्गलधातु लोहितम् ॥

अस्य भेदाः ।

रीतिका द्विविधा ज्ञेया तत्राद्या राजरीतिका ।  
ब्रह्मरौति द्वितीया सा काकतुण्डी च कथ्यते ॥  
संतसा काञ्जिके द्विसा ताम्राभा राजरीतिका ।  
एवं या जायते कृष्णा काकतुण्डी मता हि सा ॥  
यशोदं द्विगुणं ताम्रं द्राविते राजरीतिका ।  
ताम्राच्च जायते ब्रह्मरीतिका नागयोगतः ॥  
तिक्का राजरीति रुक्षा जन्तुम्बी रक्तपित्तनुत् ।  
वस्तिविशेषधिनी योगात् सोषणवीर्या च शीतला ।  
काकतुण्डी गतस्नेहा तिक्कोषणा कफपित्तनुत् ॥

यकृत्प्रीहहरा सा च शोतवीर्या प्रकीर्तिता ।  
रीतिकायुगलं पाण्डुरोगम्भं कृमिनाशनम् ॥

## CHAPTER III.

## MIXED METALS.

*Pittala (Brass).*

Its varieties.

Riti or Pittala is of two kinds, viz. (1) raja-riti and (2) brahma-riti or kaka-tundi. Raja-riti is that variety of brass which assumes the colour of copper after it is heated and immersed in kanji. Brahma-riti or kaka-tundi is that variety of copper which assumes a black colour, if treated in the afore-said way. Raja-riti consists of two parts of copper and one part of zinc, whereas brahma-riti is the product of copper, zinc, and lead.

Raja-riti is bitter, coarse, destroyer of worms, curer of haemorrhage, and purifier of the abdomen. It is cooling, but produces heat in the system, if combined with other materials.

Kaka-tundi is coarse, bitter, warm in its immediate effect, but cooling afterwards, destroyer of kapha and pittam, and curer of diseases affecting the spleen and the liver.

Both the varieties are curer of anemia and worms.

शुभाशुभपित्तलस्य लक्षणम् ।

गुर्वी मृद्धी च पीताभा सारांगी ताढ़नक्षमा ।  
सुखिग्धा मसृणाङ्गी च रीतिरेताद्वशी शुभा ॥

पाण्डुपीता खरा रुक्षा वर्वरा ताङ्गनाक्षमा ।  
पूतिगन्धा तथा लघी रीतिर्नेष्टा रसादिषु ॥

*Characteristics of good and bad brass.*

Good brass is heavy, mild, yellowish, full of substance, malleable, soft, and smooth. Bad brass is blackish yellow, rough, coarse, ugly, brittle, yielding bad odour, and light. Such copper is not fit for being used in medicines.

पित्तलस्य शोधनम् ।  
प्रथमोविधिः ।

पित्तलं च तथा कांस्यं ताम्रवन् मारयेत् पृथक् ।  
ताम्रवच्छोधनं तेषां ताम्रवद् गुणकारकम् ॥

*Purification of pittala (brass).*

Brass as well as bell-metal is to be purified and incinerated in the same way as copper.

द्वितीयोविधिः ।  
तसा क्षिप्ता च निर्गुण्डीरसे श्यामारजोऽन्विते ।  
पञ्चवारेण संशुद्धिं रीतिरायाति निश्चितम् ॥

*Second process.*

Brass is purified, if it is heated for five times and immersed each time into the juice of nirgundi, mixed with powdered turmeric.

तृतीयोविधिः ।

त्रिक्षारं पञ्चलवनं सप्तधाम्लेन भावयेत् ।  
कांस्यारकूटपत्राणि तेन कल्केन लेपयेत् ।  
ततो गजपुटे पाकात् शुद्धिं यान्ति न संशयः ॥

### Third process.

The three ksharas and five salts are to be subjected to bhavana for seven times with a sour vegetable juice. Leaves of brass and bell-metal are then to be smeared with the paste, referred to above, and subjected to heat by Gaja-putam. This results in the purification of the leaves.

चतुर्थोविधिः ।

सुवर्णरीतिकाचूर्णं भक्षितं विष्ठितं पुनः ।  
छागेन कृष्णवर्णेन मत्तेन तरुणेन च ॥  
तज्जिसं खर्परे दग्धं द्रुतं मुञ्चति शोभनाम् ।  
चतुर्दशलसद्वर्णसुवर्णसदशच्छविम् ।  
देहलोहकरी प्रोक्ता युक्ता रसरसायने ॥

### Fourth process.

A lusty young goat of black colour is to be fed with powdered brass of an excellent colour, which, when come out of the goat's stomach in the form of stool, is to be burnt in an earthen vessel with the result that excellent brass resembling gold of fourteen units of colour will come out of it. This brass,

when properly incinerated, serves to strengthen the body. It is important both in alchemy and in medicine.

अस्य मारणम् ।

प्रथमोविधिः ।

निम्बुरसशिलागन्धवेष्टिता पुटिताष्ठधा ।  
रीतिरायाति भस्मत्वं ततो योज्या यथायथम् ॥

*Incineration of pittala.*

*First process,*

Brass is incinerated, if it is subjected to heat by putam for eight times, after having been smeared each time with a paste made of lemon juice, manas-shila, and sulphur.

द्वितीयोविधिः ।

ताप्रवन्मारणं तस्याः कृत्वा सर्वत्र योजयेत् ।  
प्रियते गन्धतालाभ्यां युक्ता वा पुटपाकतः ॥

*Second process.*

Brass may be incinerated in the same way as copper. It may also be incinerated, if subjected to heat by putam after having been smeared with a paste made of sulphur and orpiment.

तृतीयोविधिः ।

अर्कक्षीरं वटक्षीरं निर्गुण्डीक्षीरकं तथा ।  
ताम्ररीतिध्वनिध्वंसे समगन्धकयोगतः ।  
पुटपाकप्रकारेण समर्थं जायते ध्रुवम् ॥

### Third process.

Copper, brass, as well as bell-metal is killed, if subjected to heat by putam, after having been smeared with a paste made of the milks of arka, banyan, and nirgundi, rubbed with an equal quantity of sulphur.

पित्तलस्य व्यवहारः ।

मृतारकूटकं कान्तं व्योमसत्त्वं च मारितम् ।  
त्रयं समांशकं तुल्यव्योषं जन्तुम्भसंयुतम् ॥  
ब्रह्मबीजाजमोदामिभम्भाततिलसंयुतम् ।  
सेवितं निष्कमात्रं हि जन्तुम्भं कुष्ठनाशनम् ।  
विशेषाच्छ्वेतकुष्ठम्भं दीपनं पाचनं हितम् ॥

### Use of brass.

Incinerated brass, kanta iron, essence of mica,—all equal in quantity to trikatu, biranga, palasha seeds, vana-jamani, chirtraka roots, bhallataka oil, and tila (sesamum)—all of these are to be mixed together and taken in doses of one fourth of a tola a day, It cures worms, leprosy, and leucoderma. It increases appetite and power of digestion.

कांस्यपित्तलयोर्वेद्धः ।

आरं तारं समं कृत्वा मृतवंगं नियोजयेत् ।  
एषा राजवती विद्या पिता पुत्रं न भाषते ॥

*Transmutation of brass and bell-metal.*

Brass and silver, equal in quantity, are to be melted. Incinerated vanga or tin is to be mixed, little by little, with this amalgam with the result that the whole thing will turn into silver.

अथ कांस्यम् ।

धनिश्च कांस्यकं कांस्यं घोषपुष्पं च घोषकम् ।  
घोषो घोषमग्निलोहं घोषा च कथ्यते हि तत् ॥  
चतुर्भागेन तास्रेण भागैकखुरकेण च ।  
विद्रुतेन भवेत् कांस्यं रसे साधु तदेव स्यात् ।

*Kansya (Bell-metal).*

Bell-metal is composed of four parts of copper and one part of vanga, melted together. Bell-metal, thus prepared, is commendable in medicines.

शुभकांस्यस्य लक्षणम् ।

तीक्ष्णशब्दं मृदु ह्लिघमीषच्छ्यामलशुभ्रकम् ।  
निर्मलं दाहरकं च षट्कं कांस्यं प्रशस्यते ॥

*Characteristics of good bell-metal.*

Good bell-metal has the following characteristics :—(1) sharp sound, (2) softness, (3) mildness, (4) dusky white colour, (5) freedom from impurities and (6) assumption of red colour, when heated.

अशुभकांस्यस्य लक्षणम्

तत् पीतं दहने ताङ्रं खरं रुक्षं घनासहम् ।  
मर्दनादागतज्योतिः षट्कं कांस्यं परित्यजेत् ॥

*Characteristics of bad bell-metal.*

Bell-metal of an inferior kind is (1) yellow in colour. (2) When heated, it assumes the colour of copper. (3) It is sharp, (4) coarse, (5) unable to stand percussion, and (6) turns glazy when rubbed with something else.

कांस्य गुणः ।

कांस्यं लघु च तिक्तोषणं लेखनं हक्क्रसादनम् ।  
क्रिमिकुष्ठहरं वातपित्तम् दीपनं हि तत् ॥  
घृतमेकं विना चान्यत् सर्वं कांस्यगतं नृणाम् ।  
भुक्तमारोग्यसुखदं हितं सात्म्यकरं तथा ।  
रससेवी न भुजीत कांस्ये च कदलीदले ॥ ५

\* प्रथमखण्डे २०४ पृष्ठं द्रष्टव्यम् ।

*Properties of Bell-metal.*

Bell-metal is light, bitter, and warm, reducer of fat, improver of eye-sight, curer of worms and leprosy, pacifier of vayu and pittam, increaser of power of digestion. Every article of food stuff, except clarified butter, becomes salutary to the system, if served on utensils made of bell-metal. One who takes a mercurial preparation should not take his food served on a bell-metal utensil.\*

अस्य शोधनंम् ।

प्रथमोविधिः ।

१२३ पृष्ठे तृतीयोविधिः १४३ पृष्ठे प्रथमो विधिस्तथा १४४ पृष्ठे  
तृतीयो विधिश्च द्रष्टव्याः ।

*Purification of Bell-metal.*

*First process.*

See Processes I and III, pages, 143-144 and Process III, page 124.

द्वितीयोविधिः ।

तसं कांस्यं गवां मूत्रे वापितं परिशुद्ध्यति ।

यामैकमथवा स्विन्नं तस्मिन्ने व हृदामिना ॥

*Second process.*

Leaves of bell-metal are purified, if they are heated and immersed red hot into cow's urine, or boiled for three hours in the same liquid by a strong heat.

\* See page 204, Vol. I.

अस्य मारणम् ।

प्रथमोविधिः ।

( प्रथम खण्डे २४७ पृष्ठे चतुर्थोविधि द्रष्टव्यः । )

*Incineration of Bell-metal.*

**First process.**

( See page 247, Process No. 4, Vol. II ).

द्वितीयोविधिः ।

पत्तलीकृतपत्रं हि कांस्यस्य शोधितस्य च ।

भ्रियते गन्धतालाभ्यां निरुत्थं पञ्चभिः पुटैः ॥

**Second process.**

Thin leaves of bell-metal, duly purified, are reduced absolutely to ashes, if they are subjected to heat by putam for five times, after having been smeared each time with a paste made of sulphur and orpiment.

अथ वर्त्तलोहम् ।

कांस्याकरीतिलोहाहिजातं तद्वर्त्तलोहकम् ।

तदेव पञ्चलोहाख्यं लोहविद्वभिरुदाहृतम् ॥

*Varta-loha.*

It is an amalgam of bell-metal, copper, brass, iron, and lead. It is also called pancha-loha (amalgam of five metals).

अस्य गुणः ।

( १ )

हिमाम्लं कटुकं रुचं कफपित्तविनाशनम् ।  
रुच्यं त्वच्यं कृमिन्द्रं च नेत्रं य मलविशोधनम् ॥

*Its properties.*

( १ )

Varta-loha is cool, sour, pungent, and coarse. It pacifies kapha and pittam. It increases appetite, is beneficial to skin and eye-sight, is a killer of worms, and purifier of stool, urine, and other excreta from the system.

( २ )

तद्वाणुडे साधितं सर्वमन्त्रब्यज्ञनसूपकम् ।  
अम्लेन वर्जितं चातिदीपनं पाचनं हितम् ॥

( २ )

All sorts of food, prepared in an utensil of this metal, is salutary to the system, and serves to increase the power of digestion, if there is nothing of sour in the materials cooked.

अस्य शोधनमारणम् ।

द्रुतमश्वजले द्विसं वर्त्तलोहं विशुध्यति ।  
स्त्रियते गन्धतालाभ्यां पुटितं तद्यथाविधि ॥

*Purification and Incineration of Varta-loha.*

Varta-loha is purified, if it is melted and immersed into the urine of horse. It is incinerated, if it is subjected to heat by putam after having been smeared with sulphur and orpiment.

## अथ त्रिलोहम् ।

पञ्चविंशतिः स्वर्णस्य तथा रौप्यस्य षोडशः ।

ताम्रस्य दश भागाश्च त्रिलोहं मिलिता मतम् ॥

त्रिलोहं सर्वदोषग्नं परमेव रसायनम् ।

पाचनं दीपनं चैव सर्वब्याधिविनाशनम् ॥

*Triloha.*

Twenty five parts of gold, sixteen parts of silver, and ten parts of copper, melted together, form what is called the triloha. It destroys all the doshas and is a great rasayanam. It increases the power of digestion and is a curer of all the diseases.

## अस्य शोधनमारणम् ।

शोधनं मारणं ज्ञेयं त्रिलोहस्य सुवर्णवत् ।

अशोधितममारितं त्रिलोहं हि विषोपमम् ॥

*Purification and Incineration of Triloha.*

It is purified and incinerated in the same way as gold. Triloha, not properly purified and incinerated, acts like poison.

त्रिलोहरसायनम् ।

रक्तिकामानतो भस्म त्रिलोहस्य यथाविधि ।  
सर्पिं मधुवराव्योषसंयुक्तं यस्तु सेवते ॥  
पथ्याशी नियतं प्रातः दीर्घायुः स सुखी सदा ।  
बलीपलितनिर्मुक्तो भजते विपुलश्रियम् ॥

*Triloha Rasayanam.*

One who takes every morning one racti of incinerated tri-loha, mixed with honey, clarified butter, triphala, and trikatu, and observes the prescribed diet, lives a healthy, happy, and long life, without being affected by senile decay.

अथ भूनागसत्त्वम् ।

भूनागान् स्वर्णभूमिजान् स्वर्णसत्त्वान् विजानोयात् ।  
इत्येवं ज्ञायते सत्त्वं तेषां जनुस्थलक्रमात् ॥ \*  
वज्ञाणां द्रावणार्थाय सत्त्वं भूनागजं श्रेयः ।  
तदेव परमं तेजः सूतराजेन्द्रवज्ञयोः ॥

*Essence of Earthworms. \**

Cold is the essence of earthworms growing in the vicinity of gold mines. The nature of the essence of other earthworms is similarly ascertained with reference to the nature of their place of birth. Essence

\* द्वितीय स्पष्टे २३४ पृष्ठं द्रष्टव्यम् ।

\* See page 234, Vol. II,

of earthworms (whether gold, silver, iron, or copper) is useful for the purpose of liquefaction of diamonds and other hard stones. It also increases the potency of mercury and diamonds.

खरसत्तम् ।

धौतं भूनागसम्भूतं मर्दयेद् भृङ्गजद्रवैः ।  
 निम्बुद्रवैश्च निर्गुण्ड्याः खरसैत्त्रिदिनं पृथक् ॥  
 तदुद्वावणगणोपेतं संमर्दय वटकीकृतम् । \*  
 निरुध्य दृढमूषायां द्विदरणं प्रधमेद् दृढम् ॥  
 स्वतः शीतं समाहृत्य पट्टके विनिवेश्य तत् ।  
 रवकान् राजिकातुल्यान् रेणूनतिभरान्वितान् ॥  
 द्वादशांशार्कसंयुक्तान् ध्मात्वा तान् रवकान् पचेत् ।  
 प्रक्षाल्य रवकानाशु समादाय प्रयत्नतः ।  
 वज्ञादिद्रवणं तेन प्रकुर्वात यथेष्टिसतम् ॥  
 खरसत्त्वमिदं प्रोक्तं रसायनमनुक्तमम् ।  
 द्वित्रमूषासु वैकस्यां सत्त्वं भवति निश्चितम् ॥

*Khara-sattwam.*

Essence of earthworms is to be cleansed with water, and rubbed for one day each with the juice of bhringa-raja, nimboo (lemon fruit), and nirgundi. It is then to be rubbed with the Dravana-varga \* and

\* प्रथम खण्डे ३०५ पृष्ठं द्रष्टव्यम् ।

\* See page 305, Vol. I.

made into a lump, which is to be confined in a strong crucible, and heated steadily for forty eight minutes. When cooled of itself, the contents of the crucible are to be taken out and kept on a piece of smooth stone slab from which are to be collected the heavy metallic dusts of the shape of mustard seeds. These are to be mixed with one twelfth their weight of copper, and again heated in a crucible. The metallic dust is then to be separated from foreign matter by being washed off with water. It is then to be used for the liquefaction of diamond, etc. It is called khara-sattwam. It is not a good rasayanan (a medicine which can prevent and cure senile decay).

भूनागस्य श्रेष्ठसत्त्वपातनविधिः ।

भूमिनागान् समादाय चतुःप्रस्थमितान् शुभान् ।  
 सुवर्णरूप्यताम्रायस्कान्तसम्भूतभूमिजान् ॥  
 प्रद्वाल्य रजनीतोयैः शीतलैश्च जलैरपि ।  
 उपोषितं मयूरं वा शूरं वा चरणायुधम् ॥  
 क्रमेण चारयित्वाऽथ तद्विषां समुपाहरेत् ।  
 क्वाराम्लैः सह संपेष्य विशोष्य च खरातपे ॥  
 ततः खर्परके निष्पत्वा भर्जयित्वा मसीं चरेत् ।  
 मसीं द्रावणवर्गेण संयुक्तां संप्रमर्दिताम् ॥\*

\* प्रथमखण्डे ३०५ पृष्ठं द्रष्टव्यम् ।

निरुद्ध्य कोष्ठिकामध्ये प्रधमेद् घटिकाद्वयम् ।  
 शीतलीभूतमूषायाः खोटमाहृत्य पेषयेत् ॥  
 प्रक्षालय रवकानाशु समादाय प्रयत्नतः ।  
 सुवर्णरेणुवद् ध्मात्वा नवं कृत्वा नियोजयेत् ॥

*Extraction of the best essence of earthworms.*

Four prasthas ( $4 \times 64$  tolas) of earthworms are to be collected from the vicinity of mines of gold, silver, copper, or load-stone, and are to be washed by means of turmeric juice and cold water. These are then to be gradually made to be eaten by a hungry peacock, boar, or cock, and its stool collected. This stool is to be rubbed with ksharas and amlas, dried by the intense rays of the sun, and then fried in an earthen pot till it turns as black as ink. This black powder is to be rubbed with the ingredients which facilitate the melting of hard metal (see page 305, Vol. I.), and then heated for forty eight minutes by means of a bellows. When the crucible is cooled, the contents are to be powdered and washed off, and the metallic dust to be collected carefully. This dust is to be melted like gold dust, and then used as necessary.

अनन्तरोक्तभूनागसत्त्वस्य गुणाः ।  
 भूनागोद्भवसत्त्वमुत्तमतमं श्रोसोमदेवोदितं  
 दत्तं पादमितं द्विशाणकनकेनैकां गतेनोर्मिकाम् ।\*

\* उर्मिकामंगुरीयकम् ।

तद्वौताम्बुविलेपनं स्थिरचरोऽङ्गूतं विषं नेत्ररुग्  
शूलं मूलगदं च कर्णजरुजो हन्यात् प्रसूतिग्रहम् ॥

*Use of the aforesaid essence.*

Essence of earthworms, as extracted in the aforesaid manner, is the best of all such essences. The present process was described by Soma-deva (author of Rasendra Churamani). One eighth tola of this essence, combined with half a tola of gold, is to be made into a finger-ring. The water into which this ring is kept immersed for some time can, by external application only, do away with poisons, both organic and inorganic, eye diseases, colic, piles, diseases affecting the ears, and troubles attending child-birth.

भेषजेषु रसप्राधान्यम् ।

अल्पमात्रोपयोज्यत्वादरुचेरप्रसङ्गतः ।  
क्षिप्रमारोग्यदायित्वादोषधिभ्योऽधिको रसः ।  
असाध्या व्याधिया प्रोक्ता ओषधिभिश्चिकित्सया ।  
साध्या सा प्रायशो दृष्टा रसचिकित्सनेन हि ॥  
उपरसं लुहं विषं ससूतं रस उच्यते ॥  
रसात् परतरं नास्ति त्रिषु लोकेषु भेषजम् ।  
मृतानि लोहानि रसीभवन्ति  
निघन्ति युक्तानि महामयानि ।

अभ्यासयोगाद् दृढदेहसिद्धिं  
कुर्वन्ति रुग्जन्मजराविनाशम् ॥

*Superiority of metallic drugs.*

A medicine, prepared mainly from mercury and minerals, is superior to that prepared from herbs, in as much as (1) the former can be administered in much smaller doses than the latter ; (2) it does not give rise to aversion in the patient who takes it ; (3) it cures diseases more quickly than the latter ; and (4) it cures diseases which are considered incurable by medicines prepared from herbs. Medicines prepared from mercury, with or without the addition of other minerals, poison, etc. are the best of all the medicines known to the world.

Incinerated metals assume, to a certain extent, the properties of mercury. They can also cure diseases which are troublesome and attended with complications. If used for a long time, they can not only cure diseases but also strengthen the body and cure and prevent senile decay.

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## चतुर्थोऽध्यायः ।

अथ रत्नानि ।

जातौ जातौ यदुत्कृष्टं तद्धि रत्नं प्रचक्षते ।  
रत्नश्च वरपाषाणं रमन्ते यत्र मानवाः ॥

रत्नानां प्रकाराः ।

वज्रं मरकतं चैव माणिक्यं मौक्किकं तथा ।  
नीलमणिगोमेदं च वैदूर्यं दग्धहीरकम् ॥  
स्फटिकं चन्द्रकान्तं च सूर्यकान्तं प्रबालकम् ।  
कर्केतं पुष्परागं च राजावत्तं च भीष्मकम् ।  
एते हि मणयो क्षेयाः सूतबन्धनकारकाः ॥  
पालङ्कं रुधिरं पूर्ति तार्कजं पीलु चोपलम् ।  
सुगन्धिकं च विक्षेया उपरत्नानि सप्तकम् ॥  
यत्ततस्ते प्रयोक्तव्या रसे रसायने तथा ॥

\* सर्वेषां रत्नोपरत्नानां विस्तृतविवरणार्थं प्रधानतो निष्ठलिखिताः  
ग्रन्था द्रष्टव्याः— बृहत्संहिता, भोजकृतयुक्तिकल्पतरुः, विष्णुधर्मोत्तर-  
पुराणम्, अग्निपुराणम्, गरुडपुराणम्, तथागस्त्यप्रणीतं रत्नशास्त्रम् ।

## CHAPTER IV.

*Ratnas (Gems).*

Gems are precious stones. The best of them are as follows :—(1) Vajram (diamond), (2) marakata (emerald), (3) manikyam (rubies), (4) mucta (pearls), (5) nila-mani (sapphire), (6) gomedam (zircon), (7) vaiduryam (oriental cat's eye), (8) dagdha-hirakam or vaikrantam (garnet), (9) sphatikam (quartz), (10) chandra-kantam (moon-stone), (11) surya-kantam sun-stone), (12) pravalam (coral), (13) karketam (chrysoberyl or chrysolite), (14) pusparaga (topaz), (15) rajavarta (lapis lazuli), and (16) bhismakam (a kind of anti-poisonous white quartz).

These gems are used in consolidating mercury.

The following are some of the upa-ratnas or minor gems :—(1) palanka (onyx), (2) rudhiram (carnelian), (3) puttika (peridot or bottle-green stone), (4) turkshajam (turquoise, biraja, or peroja), (5) pilu (jade), (6) upalam (opal, chalcedony, and agate), and (7) sugandhikam (spinel),

All these ratnas and uparatnas may be used in the preparations of mercury as well as in preparing medicines meant for curing and preventing diseases and senile decay.

\* For a detailed account of these stones, see Vrihat Sanhita of Varahamihira (1st century B. C.), Jukti- kalpa-taru of Bhoja- raja, Vishnudharmottara puranam, Agnipuranam, Garura-puranam. Ratna-shastram by the sage Agastya, etc.

पञ्चरत्नम् ।

( १ )

पद्मरागेन्द्रनीलाख्यौ तथा मरकतोत्तमः ।

पुष्परागश्च वज्राख्यः पञ्च रत्नवराः स्मृताः ॥

*The Five Gems.*

( १ )

The following five are reckoned to be gems of superior quality :—(1) padma-raga (ruby), (2) indra-nila (sapphire), (3) marakata (emerald), (4) puspa-raga (topaz), and (5) hiraka (diamond).

( २ )

नीलकं वज्रकं चेति पद्मरागश्च मौक्किकम् ।

विद्रुमं चेति विज्ञेयं पञ्चरत्नं मनीषिभिः ॥

( २ )

The following five are gems in ordinary use :— sapphire, diamond, ruby, pearl, and coral.

प्रहरत्नानि ( नवरत्नम् ) ।

माणिक्यमुक्ताफलविद्रुमाणि

तार्द्यश्च पुष्पं भिदुरं च नीलम् ।\*

गोमेदकं चाथ विदूरकं च

क्रमेण रत्नानि नवयग्नाणाम् ॥

\* तार्द्यमिति मरकताख्यं पाषाणम् । भिदुरमिति हीरकम् ।

*Gems favourite to the planets.*

Manikya (ruby), mucta (pearl), pravala (coral), turkshya (emerald), puspa-raga (topaz), hiraka (diamond), nila-mani (sapphire), gomedam (zircon), and vaiduryam (oriental cat's eye)—These nine gems are favourites, respectively, to the nine planets, viz. Sun, Moon, Mars, Mercury, Jupiter, Venus, Saturn, Rahu (Dragon's head), and Ketu (Dragon's tail). \*

व्यवहारयोग्यरक्षानि ।

रसे रसायने दाने धारणे देवतार्चने ।

सुलक्ष्माणि सुजातीनि रत्नान्युक्तानि सिद्धये ॥

*Gems fit for use.*

Only gems of excellent qualities should be used in mercurial preparations, in medicines meant to cure and prevent diseases and senile decay, in making gifts to objects of charity (such as priests, astrologers, etc), in being used by one's own self as an article of jewellery conducive to health and happiness, and in making offerings to God. Gems of inferior quality are abortive for each of these purposes.

\* In addition to these nine planets, the Hindu Astronomy recognises five minor planets (See Brihat Parashara Hora Shastra).

अथ वज्रम् ।

हीरकः पुंसि वज्रोऽख्नी चन्द्रो मणिवरश्च सः ।  
 हीरश्च रत्नमुख्यं च सूचीमुखं वरारकम् ॥  
 अभेद्यमशिरं दृढं षट्कोणं भार्गवं तथा ।  
 बहुधारश्च वज्राहं शतकोटी महामणिः ॥  
 आयुःप्रदं भट्टिति सद्गुणदं च वृष्यम्  
 दोषत्रयप्रशमनं सकलामयम्भम् ।  
 सूतेन्द्रबन्धवधसद्गुणकृत् सुदीपि  
 मृत्युञ्जयं तदसृतोपममेव वज्रम् ॥

*Vajra or Hiraka (Diamond).*

Diamond is increaser of longevity. It makes its good qualities felt quickly. It is nutritious, pacifier of the three doshas, and curer of all the diseases. It improves the quality of the consolidation and killing of mercury, is an increaser of the power of digestion, is an enemy of death, and is like nectar itself.

वज्राणां वर्णाः ।

हीरः श्वेतः स्मृतो विप्रो लोहितः क्षत्रियः स्मृतः ।  
 पीतो वैश्योऽसितः शूद्रश्चतुवर्णात्मकश्च सः ॥  
 रसायनवरो विप्रः सर्वसिद्धिप्रदायकः ।  
 स्वल्परसायनः क्षत्रः सफलो रोगनाशने ॥

वैश्यो धनप्रदः प्रोक्तस्तथा वादे फलप्रदः ।  
शूद्रो नाशयति व्याधीन् वयःस्तम्भं करोति च ॥

*Colour of Diamonds.*

Diamonds are of four different colours, viz., white, red, yellow, and black. The white variety is beneficial in all respects, and is a rasayanam or curer and preventer of diseases and senile decay. The red variety also is, to a certain extent, a rasayanam. The yellow variety is a giver of wealth (if worn with a ring), and is useful in alchemical operations. The black variety is a destroyer of diseases and a preventer of senile decay.

वज्राणां भेदान्तरम् ।

( १ )

अष्टाक्षं वाऽष्टफलकं षट्कोणमतिभासुरम् ।  
अम्बुदेन्द्रजलाभासं शुभ्रं पंचज्ञमुच्यते ॥  
तदेव चिपिटाकारं स्त्रीवज्रं वर्तुलायतम् ।  
वर्तुलं कुण्ठकोणाप्रं किञ्चिद्गुरु नपुंसकम् ॥

*Another Classification of Diamonds.*

(I)

Diamonds are of three kinds, viz. (1) masculine, (2) feminine, and (3) neuter. The former have six or eight angles or eight faces. They are very bright, and resemble, in lustre, rain drops falling at the time

of the appearance of a rainbow in the sky. They are flat-shaped, whereas feminine diamonds are cylindrical, depressed at the extremities, and are slightly heavy.

( २ )

सुवृत्ताः फलसम्पूर्णस्तेजोयुक्ता वृहत्तराः ।  
पुरुषास्ते समाख्याता रेखाबिन्दुविवर्जिताः ॥  
रेखाबिन्दुसमायुक्ताः षड्खास्ते लियः स्मृताः ।  
त्रिकोणाः पत्तला दीर्घा विज्ञेयास्ते नपुंसकाः ॥

( २ )

Masculine diamonds are well-rounded, well-faced, bright, comparatively big in size, and devoid of lines and spots.

Feminine diamonds have six angles and are full of spots and lines. The neuter diamonds are three-angled, thin, and elongated.

वज्रमेदानां गुणाः ।

वज्रेषु पुरुषाः श्रेष्ठा वेधक रसबन्धकाः ।  
लियः कुर्वन्ति कायस्य कान्ति लीणां सुखप्रदाः ॥  
नपुंसकास्त्ववीर्याः स्युरकामाः सत्त्ववर्जिताः ।  
लियः लीभ्यः प्रदातव्यं ङ्कीवं ङ्कीवे प्रयोजयेत् ॥  
सर्वेभ्यः सर्वदा देयाः पुरुषा वीर्यवर्ढनाः ।  
पुत्रकामा न धारयेन् नारी वज्रं कदाचन ॥

*Merits of different kinds of diamonds.*

Masculine diamonds are the best of all. They are able to help the transmutation of metals and to consolidate mercury. Feminine diamonds bring happiness to women and enhance their beauty. Neuter diamonds are impotent, useless, and devoid of essence.

Feminine diamonds are to be worn by women, neuter ones by hermaphrodites, but masculine diamonds may be worn always by any person, male, female, or hermaphrodite. A woman who wants to give birth to a son should on no account wear a diamond.

उत्तमवभव्य लक्षणानि ।

( १ )

रत्नश्रेष्ठतमं वज्रं नीचे गोमेदविद्रुमे ।  
 नायसोऽप्निख्यते रत्नं हित्वा मौक्किकविद्रुमौ ॥  
 पाषाणेनापि च प्राय इति रत्नविदो जगुः ।  
 न जरां यान्ति रत्नानि विद्रुमं मौक्किकं विना ॥  
 गुरुता सर्वरत्नानां गौरवाधारकारकम् ।  
 वज्रे तद्वैपरीत्यं हि सूरयः परिचक्षते ॥  
 श्रेष्ठं वज्रं लघु ज्ञेयं तरत्यम्भसि तत् खलु ।  
 पञ्चदोषैर्विनिर्मुकं स्त्रिगंधं च चन्द्ररश्मिवत् ॥

*Characteristics of good Diamond.*

( १ )

Vajram or diamond is the best of all gems, whereas gomeda (zircon) and pravala (coral) are inferior to the rest. None of the gems, except pearl and coral, can be scratched by iron, or even by stones, generally. None of the gems, except pearls and corals, undergoes decay. Heaviness is generally an indicator of preciousness in gems ; but the case is quite the reverse with diamonds. Diamonds of superior quality are so light as to float on water. They are free from the five defects (to be described below) and are as soothing as moon's rays.

( २ )

यत् पाषाणतले निकाषनिकरे नोदुघृष्टते निष्ठुरे ।  
यच्चान्योपललोहमुदगरमुखैर्लेखान्न यात्याहनम् ।  
यच्चान्यन् निजलीलयैव दलयेद् कञ्जेण वा भिद्यते  
तज्जात्यं कुलिशं वदन्ति कुशलाः श्लाघ्यं महार्घं

च तत् ॥

( २ )

Diamond of an excellent quality is that which cannot be worn out by being rubbed with the surface of even a very hard touch stone ; which cannot be cracked even by the sharp edges of other stones, iron instruments, etc ; which can easily create a

crack on other substances ; and which can be rent asunder by another diamond only. Such diamonds are of a high order and very precious.

अशुभवज्ञस्य लक्षणानि ।

भस्माभं काकपादश्च रेखाक्रान्तं च वर्तुलम् ।  
आधारमलिनं विन्दुत्रासयुक् स्फुटितं तथा ।  
नीलाभं चिपिटं रुद्धं तद्वज्रं दोषलं त्यजेत् ॥

*Characteristics of bad diamonds.*

Diamonds of the following description are bad :—

- (1) Those which are of ash colour ; (2) those which have got spots of the shape of a crow's feet, (3) those which are marked by lines, (4) those which are cylindrical, (5) those which darken or soil their foils or receptacles, (6) those which have got spots, (7) those which have got cracks, (8) those which are rent asunder, (9) those which are of blue colour, 10) those which are flat-shaped, and (11) those which are coarse.

Such diamonds are to be avoided.

सर्वरक्षाणां साधारणदोषाः ।  
गारस्त्रासश्च विन्दुश्च रेखा च जलगर्भता ।\*  
सर्वरक्षेष्वमी पञ्च दोषाः साधारणा मताः ।  
क्षेत्रतोयभवा दोषा रक्षेषु ते लग्नन्ति न ॥

\* गारः कर्दमं मलमित्यर्थः ।

*Defects found in gems in general.*

The following five are the defects found in gems in general :—dirt, crack, spots, lined spot, and bubble spot.

Gems are not affected by defects in the soil in which they are found or in the water in which they are submerged.

शोधनमारणहीनवज्रस्यावगुणाः ।

अशुद्धं कुरुते वज्रं कुष्ठं पाश्वव्यथां तथा ।  
पाण्डुतापगुरुत्वं च तस्मात् संशोध्य मारयेत् ॥

*Evil effects of Diamonds, not properly purified  
and incinerated.*

Diamonds, not properly purified and incinerated, give rise to leprosy, pain in the side ribs, anemia, inflammation, and heaviness of the limbs. Diamonds should, therefore, be properly purified and incinerated.

वज्रस्य शोधनम् ।

ग्रथमोविद्यः ।

कुलत्थकथितैः स्विन्नं कोद्रवकथितेन वा ।\*

यामैकं दोलिकायन्त्रे वज्रं शुध्यति निश्चितम् ॥

\* कोद्रवः कोदो इति भाषा ।

*Purification of Diamonds.***First process.**

Diamond is purified, if it is boiled for three hours, by means of a Dola-Jantram, with the decoction of kulattha or kodrava (a kind of grass paddy).

द्वितीयोविधिः ।

व्याघ्रीकन्दयुतं वज्रं दोलायन्त्रेण पाचितम् ॥  
सप्ताहं कोद्रवकाथे कौलत्थे विमलं भवेत् ॥

**Second process.**

Diamond is purified, if it is put inside the tuber of vyaghri (red eranda plant or kantakari), and boiled for seven days, by means of a Dula-Jantram, with the decoction of kodrava and kulattha.

तृतीयोविधिः ।

गृहीत्वा तु शुभं वज्रं व्याघ्रीकन्दोदरे त्रिपेत् ।  
महिषीविष्टया लिप्त्वा करीषाग्नौ विपाचयेत् ॥  
निशायां तु चतुर्यामं निशान्ते चाऽश्वमूत्रके ।  
सेचयेत् तानि प्रत्येकं सप्तरात्रेण शुद्ध्यति ॥

**Third process.**

Diamond of excellent quality is to be put inside the tuber of vyaghri (red eranda plant or kantakari).

\* व्याघ्रीति रस्कैरण्डः कण्टकारी वा ।

This is to be covered on all sides with the stool of a she-buffalo, and burnt by means of a fire made of cow-dung cakes burning the whole night, at the close of which the diamond is to be immersed into horse's urine. This process is to be performed seven nights resulting in the purification of the diamond.

चतुर्थोविधिः ।

मेघनादा शमी श्यामा शृङ्गी मदनकोद्रवम् ।  
कुलस्थं वेतसं चैवमगस्त्यं सिन्धुवारकः ॥  
एतेषां सजलैः कार्थैर्वज्रं जम्बीरमध्यगम् ।  
दोलायन्त्रे त्रयहं पाच्यं एवं वज्रं विशुध्यति ॥

#### Fourth process.

Diamond is purified, if it is kept inside a lime fruit and boiled for three days by means of a Dola-Jantram with a decoction of meghanada, shami, shyama, shringi, madana, kodrava, kulattha, vetasa, agastya, (vasaka or vaka), and nirgundi, mixed with a sufficient quantity of water.

पञ्चमोविधिः ।

ब्याघ्रीकन्दगतं वज्रं मृदा लिप्तं पुटे पचेत् ।  
अहोरात्रं समुद्धृत्य हयमूत्रेण सेचयेत् ।  
वज्रीक्षीरेण सिञ्चे दु वा तस्यैवं खलु शुद्धये ॥

### Fifth process.

Diamond is purified, if it is kept inside the tuber of a vyaghri plant coated on all sides with mud, heated by putam for twenty four hours, and then immersed into horse's urine or milk of snuhi.

षष्ठोविधिः ।

स्वेदयेद् दोलिकायन्त्रे जयन्त्याः स्वरसेन च ।  
मणिमुक्ताप्रवालानि यामैकेन विशुद्धये ॥

### Sixth process.

Any gem or ratna is purified, if it is boiled in a Dola Jantram for one hour with the juice of jayanti leaves.

वज्राणां मारणम् ।

(१) विप्रवज्रस्य मारणम् ।

प्रथमोविधिः ।

अश्वत्थं बदरी भिरण्टी मान्त्रिकं कर्कटास्थि च ।  
तुल्यं स्तुहीपयः पिष्ठा वज्रं तदगोलके निपेत् ।  
रुद्धं । गजपुटे पाकाद् विप्रवज्रं सृतं भवेत् ॥

### *Incineration of Diamonds.*

(1) *White diamonds.*

#### First process.

Diamond of white colour is incinerated, if it is heated by Gajaputam, after having been coated on

all sides with a paste made of aswattha, vadari (plum), jhinti, makshikam, and shell of crab, all rubbed together with an equal quantity of milk of snuhi.

द्वितीयोविधिः ।

गारुडी गन्धकं तालं बदरीरससंप्लुतम् ।  
अश्वत्थस्वरसैर्भाव्यं पुटेत् पिण्डं सरक्कम् ।  
म्रियते तेन योगेन ब्रह्मवज्रं हि तत्त्वतः ॥

### Second process.

Diamond of white colour is incinerated, if it is subjected to heat by putam after having been kept inside a lump made of patala-garuri, sulphur, and orpiment, rubbed with the juice of plums, and then subjected to bhavana, first, with the juice of aswattha and then with blood (preferably bug's blood).

(२) क्षत्रियवज्रस्य मारणम् ।

प्रथमोविधिः ।

करवीरं मेषशृङ्खः बदरकमुडम्बरम् ।  
अर्कदुर्घं समं पिष्टा विश्रवन्मारयेननृपम् ॥४

### (2) Red diamonds.

#### First process.

Diamond of red colour is to be incinerated, if it is heated by Gajaputam, after having been coated

\* नृपमिति क्षत्रियवर्णवज्रम् ।

on all sides with a paste made of karabira, mesha-shringi, vadara (plum), udumbara, all rubbed with an equal quantity of milk of arka plant.

द्वितीयोविधिः ।

नीलं च शङ्खचूर्णं च शिलाभूनागशूरणम् ।  
मिथ्यते क्षत्रवज्रकमेषां मध्ये पुटेन हि ॥

### Second process.

Diamond of red colour is incinerated, if it is subjected to heat by putam, after having been confined within a lump made of nila plant (indigo), powdered conch shell, manas-shila, earthworms, and shurana.

(३) वैश्यवज्रस्य मारणम् ।

प्रथमोविधिः ।

बला चातिबला गन्धं पेषयेत् कच्छपास्थि च ।  
एतैश्च वारुणीदुग्धैमिर्यते वैश्यो विप्रवत् ॥

(3) *Yellow diamonds.*

### First process.

Diamond of yellow colour is to be incinerated, if it is heated by Gajaputam, after having been coated on all sides by a paste made of bala, atibala, sulphur, shell of tortoise, all rubbed with an equal quantity of the milk of indrabaruni.

द्वितीयोविधिः ।

स्तुहकंकरवीरं च भूनागं दरदं वटः ।  
उत्तमैर्वारुणीक्षीरैवैश्यानां मारणं पुटैः ॥

**Second process.**

Diamond of yellow colour is incinerated, if it is subjected to heat by putam after having been rubbed with the milks of snuhi, karabira, bata (banyan), and Indra-varuni, mixed with earthworms and hingula (cinnabar).

शूद्रवज्रस्य मारणम् ।

प्रथमोविधिः ।

रसोनं शूरणं शङ्खं समं पेष्यं मनःशिला ।  
वटक्षीरेण मूषान्तर्विप्रवच्छूद्रमारणम् ॥

(4) *Black Diamonds.*

**First process.**

Diamond of black colour is to be incinerated, if it is subjected to heat by Gajaputam, after having been coated on all sides with a paste made of shuranam, garlic, conch-shell, manas-shila, all rubbed with an equal quantity of the milk of banian tree.

द्वितीयोविधिः ।

गन्धाश्मकं वृतं तालं मेषशृङ्खं समांशकम् ।  
विषं कान्तं स्तुहीक्षीरं नारीपुष्पं पयःप्लुतम् ।  
एभिर्विलिप्तमूषायां धमनात् शूद्रमारणम् ॥

### Second process.

Diamond of black colour is incinerated, if it is heated in a crucible, the inner surface of which is coated with a paste made of sulphur, clarified butter, orpiment, ram's horn, aconite, load stone, milk of arka, and menstrual excretion of women—all equal in quantity and rubbed with milk.

खीनपुंसकभेदेन वज्रानां मारणे वैशिष्ट्यम् ।

स्त्रियस्तेषां स्त्रियन्ते च तत्तदोषधियोगतः ।  
चतुर्णामोषधिव्यूहैत्रियते च नपुंसकम् ॥

### *Special directions.*

Feminine diamonds are to be incinerated in the same way as described above. Neuter diamonds are to be incinerated with all the herbs combined, required for the incineration of masculine diamonds of four different colours, as described above.

सामान्येन वज्रमारणम् ।

प्रथमोविधिः ।

त्रिःसत्स कृत्वा ततृतसं खरमूत्रेण सेचयेत् ।  
मत्कुण्डैस्तालकं पिष्ठा तद्गोले कुलिशं क्षिपेत् ॥  
प्रधमातं वाजिमूत्रेण सिक्कं पूव्वोद्दितक्रमैः ।  
भस्मीभवति तद्वज्रं वज्रवत् कुरुते तनुम् ॥

(2) *Incineration of Diamonds, irrespective of colour.*

**First process.**

Diamond is to be heated and immersed into the urine of ass. Orpiment is to be rubbed with bug's blood and made into a lump, inside which the diamond is to be kept. It is then to be heated strongly and immersed into the urine of horse. Performance of this process for 21 times results in the incineration of the diamond.

द्वितीयोविधिः ।

ऊर्णायुशृङ्खः परिपिण्ड्य पिण्डमेतस्य मध्ये तु

निधाय वज्रम् ।

पिण्डेऽथवाऽधाय च वज्रबल्ल्याः पुटत्रयं तस्या रसे  
विद्यत् ॥

मृत्युरेवं भवेदस्य वज्राख्यस्य न संशयः ॥

**Second process.**

Horn of ram is to be rubbed with the juice of asthi-sanhara and made into a lump. Diamond is to be kept inside this lump and subjected to heat by putam. Three such putams result in its incineration. A lump made of asthi-sanhara creeper may be made use of in the place of a lump made of ram's horn.

तृतीयोविधिः ।

द्विवर्षरुद्रकार्पासमूलं कन्यामूलैः सह ।  
नारीस्तन्येन संपिण्य तत्र वज्रं निधापयेत् ।  
अनेन मिथते वज्रं पुटपाकविधानतः ॥

### Third process.

Diamond is incinerated, if it is heated by putam, after having been kept inside a paste made of the roots of cotton plant of two years' standing and the roots of kanya, all rubbed with a sufficient quantity of human milk.

चतुर्थोविधिः ।

मेषशृङ्गं भुजङ्गास्थि कूर्मपृष्ठाम्लवेतसैः ।  
गजदन्तसमं पिष्टा वज्रीदुर्घेन गोलकम् ॥  
कृत्वा तन्मध्यगं वज्रं मार्यते धमनेन च ॥

### Fourth process.

Ram's horn, snake's bone, tortoise shell, amla-vetasa, and elephant's tusk—all these are to be pounded and made into a lump by being rubbed with the milk of snuhi. Diamond is incinerated, if it is kept confined within this lump and heated strongly.

\* गजदन्त इत्येतस्य स्थले शशदन्त इति पाठान्तरम् ।

पञ्चमोविधिः ।

त्रिवर्षनागबल्लयास्तु कार्पासस्याऽथ मूलिका ।  
पिष्ठा तन्मध्यं वज्रं मृषामध्ये निरोधयेत् ।  
पचेद्वगजपुटे तद्वा त्रियते पुटसप्तकैः ॥

### Fifth process.

Tambula creeper (betel) of three years' standing, as well as roots of a cotton plant are to be rubbed together and made into a paste. Diamond is incinerated, if it is confined within this paste and heated by Gaja putam for seven times, a fresh paste being used each time

षष्ठोविधिः ।

मत्कुण्डानान्तु रक्तेन सप्तधाऽतपशोषितम् ।  
कुलिशं भावितं तद्वच्चूर्णिता च मनःशिला ॥  
एते च बदरीपत्रैर्वेष्टयित्वा पुटे पचेत् ।  
पुनलेप्य युनः पाच्य तद्वा त्रियते ततः ॥

### Sixth process.

Diamond is to be subjected to bhavana with the blood of bugs for seven times, and dried each time in the sun. Manas-shila is also to be similarly treated. Both these things are to be put together, covered by means of plum leaves, and then heated by putam. Performance of this process for seven times results in the incineration of the diamond.

सप्तमोविधिः ।

वज्रं महानदीशुक्तौ क्षिप्रं भाव्यं सुहुर्मूहुः ।  
 स्नुह्यकर्मन्मत्तकन्यानां द्रवेणैकेन चाहिकम् ॥  
 कृष्णकर्कटमांसे तत्‌क्षिप्त्वा च वेष्टयेद्वहिः ।  
 भूनागस्य मृदा सम्यग्धमातं भस्मत्वमाप्नुयात् ॥

### Seventh process.

Diamond, kept in shells of oyster growing in a big river, is to be subjected to bhavana, quickly and over and over again, with the juices of snuhi, arka, dhatura, and kanya, a separate day being allotted to each of these juices. The diamond is then to be surrounded on all sides with the flesh of black crab. The oyster shells are then to be closed and covered by means of mud, raised by earth-worms. The whole thing is then to be heated strongly resulting in the incineration of the diamond.

अष्टमोविधिः ।

रक्तोत्पलस्य मूलैश्च मेघनादस्य कुट्मलैः ।  
 पिण्डितैर्वेष्टितं धमातं वज्रं भस्म भवत्यलम् ॥

### Eighth process.

Diamond is incinerated, if it is heated after having been kept inside a paste, made of the roots of red water-lily and buds of meghanada.

चतुर्थोऽध्यायः ।

१८१

नवमोविधिः ।

कांस्यपात्रे हि भेकस्य मूत्रे वज्रं विनिःक्षिपेत् ।  
त्रिःसप्तकृत्वः सप्तसं वज्रमेवं मृतं भवेत् ॥

### Ninth process.

Diamond is incinerated, if it is heated 21 times and immersed each time into frog's urine, kept in a bell-metal pot.

दशमोविधिः ।

नीलज्योतिर्लंताकन्दे घृष्टं घर्मे विशोषितम् ।  
वज्रं भस्मत्वमायाति कर्मवज्रज्ञानवह्ना ॥

### Tenth process.

Diamond is incinerated, if it is subjected to a necessary amount of heat after having been rubbed with the tuber of a blue jyotismati creeper and dried in the sun.

एकादशोविधिः ।

विलिसं मतकुण्णस्याख्यैः सप्तवारं विशोषितम् ।  
कासमर्दरसापूर्णे लौहपात्रे निवेशितम् ॥\*  
सप्तवारं परिध्मातं वज्रं भस्म भवेत् खलु ।  
ब्रह्मज्योतिर्मुनोन्द्रेण क्रमोऽयं परिकीर्तिः ॥

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\* लौहपात्रे इत्येतत्य स्थले ताप्रपात्रे इत्येतत् पाठान्तरम् ।

## Eleventh process.

Diamond is incinerated, if it is smeared with the blood of bugs, dried in the sun, and then heated and immersed into the juice of kasa-marda kept in an iron pot, the whole process being repeated for seven times. This process was described by the great sage Brahma-Jyoti.

द्वादशोविधिः ।

मदनस्य फलोन्दूतरसेन क्षौणिनागकैः ।  
कृतकल्केन संलिप्य पुटेह विंशतिवारकम् ।  
वज्रचूर्णं भवेद्वय्यं योजयेच्च रसादिषु ॥

## Twelfth process.

Diamond is reduced to ashes of an excellent quality, if it is heated by putam for twenty times, after having been smeared each time with a paste, made of earthworms, rubbed with the juice of the fruits of madana tree.

त्रयोदशोविधिः ।

वज्रं मत्कुण्ठरक्तेन चतुर्वारं विभावितम् ।  
सुगन्धिमूषिकामांसैः कृत्तैर्विमर्द्य वेष्टयेत् ॥  
पुटेत् पुटैर्वाराहाख्यैस्त्रिंशद्वारं ततः परम् ।  
ध्मात्वा ध्मात्वा शतं वारान् कुलत्थकाथके च्छिपेत् ॥  
कुलत्थकाथसंयुक्तलकुचद्रवपिष्टया ।  
शिलया लिप्तमूषायां वज्रं च्छिप्त्वा निरुद्ध्य च ॥

अष्टवारं पुटेत् सम्यग् विशुष्कैश्च वनोपलैः ।  
 शतवारं ततो ध्मात्वा निद्विसं शुद्धपारदे ॥  
 निश्चितं म्रियते वज्रं भस्म वारितरं भवेत् ।  
 सत्यवाक् चन्द्रसेनको वज्रस्यैतद् विमारणम् ।  
 दृष्टप्रत्ययसंयुक्तमुक्तवान् रसकौतुको ॥

### Thirteenth process.

Diamond is to be subjected to bhavana with bug's blood for four times. It is then to be covered on all sides with the flesh of rats, cut into pieces, and heated by Baraha-putam for thirty times. It is then to be heated for 100 times and immersed each time in decoction of kulattha. The diamond is then to be heated by putam for eight times after having been confined in a crucible, the inner surface of which is to be coated with a paste made of decoction of kulattha, juice of lakucha, and manas-shila. The diamond is then to be heated for 100 times, and immersed each time in purified mercury, with the result that the diamond is reduced to ashes which can float on the surface of water.

This process was described by the chemist, Chandra Sena, founder of the Chandra dynasty.

चतुर्दशोविधिः ।

हिंगुसैन्धवसंयुक्तकाथे कुलत्थजे चिपेत् ।  
 तप्तं तप्तं पुनर्वज्रं भूयाच् चूणं त्रिसप्तधा ॥

### Fourteenth process.

Diamond is incinerated, if it is heated for 21 times, and immersed each time into the decoction of kulattha, mixed with hingu and saindhava.

पञ्चदशोविधिः ।

वज्रादिसर्वरत्नानां मारणम् ।

रसो हंसं शिला तालं गरुडं गन्धटंकणम् ।  
 भूनागं विमलं वंगं मेषशृङ्गं च चुम्बकम् ॥  
 शुकशोनितसंयुक्तं स्वेदनौषधिभावितम् ।  
 मूषालेपप्रयोगेन रत्नानां मारणं ध्रुवम् ।  
 एवं वज्रभवं भस्म वज्रस्थाने नियोजयेत् ॥

### Fifteenth process.

*General method of Incineration of all the Gems.*

Diamond and other gems are incinerated, if heated by putam, after having been confined in a crucible the inner surface of which is coated with a paste made of mercury, hingula, manas-shila, haritala, swarna-makshika, sulphur, tankanam, earth-worms, bimala, vanga, ram's horn, load stone, semen, and blood—all these mixed together and subjected to bhavana with the juices of some of the herbs generally used in incineration of gems.

वज्रस्य व्यवहारः ।

( १ )

तद्‌वज्रं चूर्णयित्वा ऽथ किञ्चिद्वृक्षणसंयुतम् ।  
खरभूनागसत्त्वेन विंशतिगुणितेन च ।  
तुल्यखण्ठेन तद्‌धमातं योजनीयं रसादिषु ॥

*Uses of Diamond.*

( १ )

The diamond, thus prepared and powdered, should be mixed with a little of borax, khara-satwa (see page 154), twenty times in weight of the diamond, and incinerated gold, equal in quantity to the diamond,—all these are to be rubbed together and heated. The product may be used in medicines.

( २ )

त्रिगुणेन रसेन व संमर्द्य गुटिकीकृतम् ।  
मुखे धृतं करोत्याशु चलदूदन्तविबन्धनम् ॥

( २ )

Incinerated diamond, rubbed with three times its weight of mercury, and made into a pill, strengthens even a tottering tooth and makes it steady.

( ३ )

त्रिंशद्‌भागमितं हि वज्रभसितं स्वर्णं कलाभागिकं  
तारं चाष्टगुणं सितामृतवरं रुद्रांशकं चान्नकम् ।

पादांशं खलु ताप्यकं वसुगुणं वैक्रान्तकं षड्गुणं  
भागोऽप्युक्तरसे रसोऽयमुदितः षाढ़गुणयसंसिद्धये ॥

( ३ )

Thirty parts of incinerated diamond, four parts of gold, eight parts of silver, eleven parts of white shankhi, four parts of mica, eight parts of swarna-makshika, and six parts of vaikranta—all these are to be mixed together and used with mercury for the enhancement of its properties by six times.

( ४ )

सूतभस्माद्वच्छंसंयुक्तं मृतवज्रस्य भस्मफलम् ।  
मृताभ्रसत्त्वमुभयोस्तुलितं परिमर्दितम् ॥  
क्षेत्राद्वाज्यसंयुतं प्राज्ञैर्गुञ्जामात्रं च सेवितम् ।  
निहन्ति सकलान् रोगान् परमेतद् रसायनम् ॥

( ५ )

Ashes of diamond, with half its quantity of incinerated mercury, ashes of the essence of mica, equal in quantity to both,—all these are to be rubbed together and taken in doses of one racti a day with honey and clarified butter. It cures all the diseases. It is a great rasayanam.

वज्रस्य मृदूकरणम् ।

मातुलुंगान्तरे वज्रं रुद्धं । लिम्प्यान् मृदा बहिः ।  
पुटेत् पश्चात् गजाख्ये हि शतशो यत्क्षतो धीमान् ॥

नागबल्ल्याद्रौलिसं तत्पत्रेणैव वेष्टयेत् ।  
भूमध्ये च स्थितं यावत् तद्वज्रं मृदुतां ब्रजेत् ॥

*Softening of Diamonds.*

Diamond is to be confined within a matulunga fruit, covered on all sides with mud. It is then to be subjected to heat by Gaja-putam for a hundred times. Next is it to be smeared with the juice of tambula (betel) leaves, wrapped up with the leaves of the same creeper, and buried deep into the earth for some time resulting in the softening of the diamond.

वज्रस्य द्रुतिः ।

( १ )

वज्रबल्ल्यन्तरस्थं च कृत्वा वज्रं निरुत्थितम् ।  
आम्लभारण्डगतं स्वेद्यं सप्ताहाद् द्रवतां ब्रजेत् ॥

*Liquefaction of diamond.*

Ashes of diamond, incapable of being restored to their former condition, are to be kept inside an asthi-sanhara creeper and immersed into a vessel filled with a sour vegetable juice (such as lime juice), and then heated for seven days with the result that it turns into a liquid.

सर्वरक्षानां द्रुतिः ।

( २ )

रामठं पञ्चलवणं क्षाराणां त्रितयं तथा ।  
 मांसद्रवोऽम्लवेतसश्चुल्लिकालवणं तथा ॥  
 स्थूलं कुम्भीफलं पकं तथा ज्वालामुखी शुभा ।\*  
 द्रवन्ती च रुदन्तो च पयस्या चित्रमूलकम् ॥  
 दुग्धं स्तुह्यास्तथार्कस्य सर्वं संमद्यं यतः ।  
 गोलं विधाय तन्मध्ये ग्रचिपेत् तदनन्तरम् ॥  
 गुणवन्नवरक्षानि जातिमन्ति शुभानि च ।  
 भूर्जेण गोलकं कृत्वा सूत्रेणावेष्य यतः ॥  
 पुनर्वस्त्रेण संवेष्य दोलायन्त्रे निधाय च ।  
 सर्वाम्लयुक्तसन्धानपरिपूर्णघटोदरे ॥  
 अहोरात्रत्रयं यावत् स्वेदयेत् तीव्रवह्निः ।  
 तस्मादाहृत्य संचालय रक्षजां द्रुतिमाहरेत् ॥  
 रक्ततुल्यप्रभा लघ्वी देहलोहकरी शुभा ॥

*Liquefaction of all the gems.*

( २ )

Hingu, five salts, the three ksharas, that variety of amla-vetasa which can decompose flesh into a liquid, nava-sara, well-developed and

\* कुम्भीफलमिति जयपालबीजम् । ज्वालामुखीति भल्लातकम् ।

well-ripened jayapala seeds, bhallataka, dravanti, rudanti, bidari, chitraka roots, milks of snuhi and arka—all these are to be rubbed together and made into a lump, into which is to be kept any of the nine gems of excellent quality. The lump is then to be wrapped up with leaves of bhurja (birch) tree, and again covered with a piece of cloth. It is then to be boiled by means of a Dola-Jantram containing fermented liquid mixed with all the amlas. Strong heat is to be applied for 72 hours at a stretch, after which the gem, in a state of liquefaction, is to be collected from inside the vessel. This liquid has the glaze of gems. It is light. It makes the body as strong as iron.

( ३ )

केतकीस्वरसं प्राह्यं सैन्धवं स्वर्णपुष्पिका ॥  
 इन्द्रगोपकसंयुक्तं सर्वं भागदे विनिक्षिपेत् ॥  
 सप्ताहं स्वेदयेत् तस्मिन् वैक्रान्तं द्रवतां व्रजेत् ।  
 लोहाष्टके तथा वज्रे वापनात् स्वेदनाद् द्रुतिः ॥  
 जायते नात्र सन्देहो योगस्यात्य प्रभावतः ।  
 कुरुते योगराजोऽयं रत्नानां द्रावणं परम् ॥

( ३ )

Juice of ketaki flower, rock-salt, swarna-flower, and indragopa insect—all these are to be kept in a vessel. Diamond and all the other stones, and

\* स्वर्णपुष्पीति स्वर्णयूथी विषलाङ्गूली वा ।

metals are liquefied, if mixed and boiled for seven days with this solution.

वज्रविकारशान्तिः ।

सितामधुघृतैः साञ्च गोदुग्धं दिनसप्तकम् ।  
विधिना सेवितं हन्ति वज्रदोषं चिरोत्थितम् ॥

*Removal of evil effects of diamond,  
not properly incinerated.*

Cow's milk, taken for seven days with sugar-candy, honey, and clarified butter, does away with the evil effects of diamond, not properly incinerated.

अथ सर्वरक्षानां शोधनक्रमः ।

व्याप्तुवन्त्यहमङ्गानि तैलविन्दुरिवाम्भसि ।  
न विना शोधनं सर्वे धात्रोमणयोऽपि च ॥  
रोगोपशमकर्त्तारः शोधनं तेन वद्यते ।  
शोधनैर्मारणै हीना हेयास्ते विषवत् सदा ॥

*Purification of Gems in general.*

Metals, minerals, and gems do not spread through the different parts of the body, if not properly purified. They are positively harmful, if used without purification and incineration.

तेषां शोधनस्य सामान्यविधिः ।

( १ )

पंवजं गारुडोऽक्षारं माणिक्यं पुष्पकं तथा ।  
 वैदूर्यकं च गोमेदं मौक्किकं च प्रवालकम् ॥  
 एतानि नवरत्नानि सदृशानि सुधारसैः ।  
 शोधितानि यथाविधि मारितानि च यत्कृतः ॥  
 शुद्धत्यस्तेन माणिक्यं जयन्त्या मौक्किकं तथा ।  
 विद्रुमं चारवर्गेण ताढ्यं गोदुग्धतस्तथा ॥  
 पुष्परागश्च सन्धानैः कुलत्थकाथसंयुतैः ।  
 तरण्डूलीयजलैर्वज्रं नीलं नीलोरसेन वा ।  
 रोचनाभिश्च गोमेदं वैदूर्यं त्रिफलाजलैः ॥

*General Process of purification of gems.*

( १ )

Masculine diamond, emerald, sapphire, ruby, topaz, cat's eye, zircon, pearl, and coral—these nine gems are like nectar itself, if purified and incinerated in the prescribed manner.

(1) Ruby, (2) pearl, (3) coral, (4) emerald, (5) topaz, (6) diamond, (7) sapphire, (8) zircon, and (9) cat's eye—these nine gems are purified by being boiled with the following, respectively :—(1) a sour vegetable juice, (2) juice of jayanti, (3) all the ksharas, (4) cow's milk, (5) fermented liquids mixed with the decoction of kulattha, (6) juice of tanduliya,

(7) juice of indigo, (8) go-rochana (dried bile of a cow sometimes found deposited in its horns), and (9), decoction of triphala.

( २ )

कुलत्थस्य पचेद्द्रोणं वारिणाष्टगुणेन च ।

तेन पादावशेषेण काथ्याश्च मणयः शिलाः ॥

आतपे त्रिदिनं शुष्कं काथसिक्तं पुनः पुनः ।

एवं शुद्ध्यति तत् सर्वं मारणीयं ततः परम् ॥

( २ )

One drona of kulattha is to be boiled with eight dronas of water. Gems and stones are to be boiled with this decoction. They are then to be dried in the sun for three days, saturated all this while with the same decoction, put upon them over and over again. This is how the gems are purified.

( ३ )

अम्लकारविपाचितं तु सकलं लोहं विशुद्धं भवेत् ।

माद्यिकोऽपि शिलाऽपि तुथगगनं तालं च

सम्यक् तथा ॥

मुक्ताविद्रुमशुक्तिकाऽथ चपला शुद्धा वराटाः शुभाः ।

जायन्तेऽमृतसन्निभाः पयसि च क्षिसः शुभः

स्याद्वलिः ॥

( ३ )

All sorts of metals, makshika, manas-shila, tut-thaka, abhra, haritala, mucta (pearl), pravala (coral), shucti (oyster-shell), chapala, and cowri-shells are purified, if boiled with a solution of vegetable acids and alkalis (ksharas). Sulphur is purified, if boiled in the same way and then immersed (through a piece of dry cloth) into milk.

( ४ )

१७२ पृष्ठे षष्ठोविधिर्दृष्ट्व्यः ।

( ४ )

See Process VI. page 172

अथ वज्रे तरतानां भस्मकमः ।

प्रथमोविधिः ।

लकुचद्रवसंपिण्डैः शिलागन्धकतालकैः ।

वज्रं विनाऽन्यरत्नानि म्रियन्तेऽष्टपुटैः खलु ॥

*Incineration of gems other than diamond.*

*First process.*

All the gems, with the exception of diamond, are incinerated, if subjected to heat by putam for eight times, after having been smeared each time with a paste made of manas-shila, gandhaka, and haritala, rubbed with the juice of lakucha.

द्वितीयोविधिः ।

कुमार्या तण्डूलीयेन स्तन्येन च निषेचयेत् ।

प्रत्येकं सप्तधा यत्तात् तप्तं तप्तं च कृत्स्नशः ॥

मौक्किकानि प्रवालानि तथा रत्नान्यशेषतः ।

क्षणाद् विविधवर्णानि मियन्ते नात्र संशयः ॥

### Second process.

Any gem may be incinerated, if it is heated and immersed, for seven times, into the juice of each of the following :—kanya, tanduliya, and human milk.

तृतीयोविधिः ।

वज्रवत् सर्वरत्नानि शोधयेन् मारयेत् तथा ।

### Third process.

The rest of the gems may be purified and incinerated in the same way as diamond.

सदोषमण्यः परिहर्त्तव्याः ।

( १ )

दोषोपस्तृष्टं मणिमप्रबोधात् विभर्ति यः कश्चन  
कश्चिदेकम् ।  
तं वन्धुदुःखञ्च सबन्धवित्तनाशाद्यो दोषगणा  
भजन्ते ॥

*Desirability of avoiding defective gems.*

( 1 )

One who uses a defective gem is subjected to such calamities as loss of friends and wealth, imprisonment, etc.

( 2 )

चण्डाल एकोऽपि यथाभिजातान् समेत्य दूरादपहन्ति  
यत्तात् ।

तथा मणीन् भूरिगुणोपपन्नान् शक्तोऽपि विद्रावयितुं  
विजातः ॥

( 2 )

Exactly as a man of noble birth is ruined by coming in contact with a man of low birth and vulgar taste, the good effects produced by a genuine gem are nullified by the contact of bad gems.

सर्वरक्षानां सामान्यगुणाः ।

मुक्ताविद्रुमवज्जेन्द्रवैदूर्यस्फटिकादिकम् ।

मणिरत्नं सरं शीतं कषायं स्वादु लेखनम् ।

चक्रघ्यं धारणात् तत्र पापालक्ष्मीविनाशनम् ॥

*General Properties of all the gems.*

They are laxative, cool, astringent, sweet, destroyer of fat, beneficial to eye-sight, and destroyer of vice and misfortune.

## अथ मरकतम् ।

मरकतं च ताक्षोत्थं गारुडः गरुडाङ्कितम् ॥  
 रौहिणेण सौपर्णं च गरुडोदगीर्णकं तथा ॥  
 पाचि च बुधरत्नं च ताद्यं गारुत्मतं तथा ।  
 अश्मगर्भं हरिन्मणिः सुलभं तन् न भूतले ॥

## प्रशस्तमरकतस्य लक्षणम् ।

हरिदवर्णं गुरु लिङ्घं स्फुरद्दरश्मचयं शुभम् ।  
 मस्तृणं भासुरं ताद्यं गाढं सप्तगुणं मतम् ॥

## MARA KATA (EMERALD).

The following seven are the features of a good emerald :—

(1) green colour, (2) heaviness, (3) softness, (4) radiating rays, (5) smoothness, (6) brightness, and (7), density.

## अशस्तमरकतस्थ लक्षणम् ।

कपिलं कक्षं नीलं पाण्डु कृष्णं सल्लाघवम् ।  
 चिपिटं विकटं कृष्णं रुचं ताद्यं न शस्यते ॥

\* ताक्षमिति पुरा महाबिकशप्रसुखमुनिभिरध्युषितं कश्यपीय-  
 हृदसन्निहितमधुना ताकिंनामधेयं यवनाधिष्ठानम् ।

*Characteristics of bad emerald.*

A bad emerald is (1) tawny, (2) coarse, (3) blue, (4) pale-black (5) light, (6) flat-shaped (7) ugly, (8) black, and (9) rough.

मरकतस्य गुणाः ।

( १ )

ज्वरच्छर्दिविषश्वाससन्त्वापामिः ॥ अद्युत् ।  
दुर्नामपारदुशोफम् तादर्यमोजोविवर्द्धनम् ॥

*Properties of emerald.*

( १ )

Emerald, duly incinerated, can cure fever, nausea, poison, asthma, abnormal excess of the three doshas, loss of the power of digestion, piles, anemia, and swelling of the body. It increases vitality.

( २ )

तस्मिन् मरकतस्थाने यत्किञ्चिदुपजायते ।  
तत् सर्वं विषरोगाणां प्रशमाय प्रकीर्त्यथते ॥  
सर्वमन्त्रौषधिगण्यन्न शक्यं चिकित्सितुम् ।  
महाहिंदष्टाप्रभवं विषं तत् तेन शाम्यति ॥

( २ )

Everything growing in a mine of emerald can counteract the evil effects of poison. Poison of a highly venomous snake, incapable of being cured by

all sorts of incantations and herbal drugs, can be done away with by emerald (duly incinerated).

महागुणं मरकतम् ।

अत्यन्तहरिद्वर्णं कोमलमर्चिर्विभेदजटिलं च ।  
 काञ्चनचूर्णेनान्तः पूर्णमिव लक्ष्यते यज्ञ ॥  
 युक्तं संस्थानगुणैः समरागं गौरवे न हीनम् ।  
 सवितुः करसंस्पर्शात् छ्वरयति सर्वाश्रमं दीप्त्या ॥  
 हित्वा च हरिदभावं यस्यान्तर्विनिहिता भवेद् दीसिः ।\*  
 अचिरप्रभाप्रभाहतनवशाद्वलसन्निभा भाति ॥  
 यज्ञ मनसः प्रसादं विदधाति निरीक्षितमतिमात्रम् ।  
 तन्मरकतं महागुणमिति रत्नविदां मनोवृत्तिः ॥

*Emeralds of superior quality.*

Emerald of superior quality is very green, soft, and complex in lustre by the penetration of rays from outside. Its interior appears to be full of dust of gold. It is characterised by a structural excellence and uniformity of colour. It is not light in weight. On sun's rays being reflected upon it, the whole room is illuminated. Without giving up the greenness of its colour, it keeps within itself its inherent lustre. It resembles in luster the beauty of green grass brightened with the effulgence of lightning. Its very sight pleases the mind.

\* हरिदभावमिति हरिद्वर्षस्य अभावम् ।

जात्यमरकतस्य परीक्षा ।

( १ )

कृत्रिमत्वं सहजत्वं दृश्यते सूरिभिः सदा ।  
घर्षयेत् प्रस्तरे व्यङ्गकाचस्तस्माद् विपद्यते ॥\*

*Test of Genuine Emerald.*

Genuineness of emeralds is tested by experts by rubbing it with a piece of stone. If treated in this way, it will break into pieces, if it is glass. This is not the case with a genuine emerald.

( २ )

लेखयेल् लौहभृङ्गेण चूर्णनाऽथ विलेपयेत् ।  
सहजः कान्तिमाप्नोति कृत्रिमो मलिनायते ॥

(2)

An emerald to be tested is to be scratched with an iron fork and then smeared with lime. Thus treated, a genuine emerald waxes in glaze, whereas an artificial one loses its lustre.

( ३ )

सन्धिविश्लेषितं रत्नमन्यमरकताद् भवेत् ।  
श्रेयष्कामैर्न तद् धार्यं क्रेतव्यं वा कथञ्चन ॥

\* व्यङ्गः विकृताङ्गः गृहीतमरकताकार इत्यर्थः ।

(3)

The emerald which is broken by another emerald should not be worn or bought.

( ४ )

क्षौमेण वाससा घृष्टा दीसि' ल्यजति पूच्चिका ।  
दीसिर्मरकतस्य हि घृष्ट्या क्षौमेण वद्धते ॥

(4)

Puttika (peridot) loses its lustre by being rubbed with a piece of silken cloth, whereas genuine emerald gains in lustre, if treated in the same way.

( ५ )

समायतनवारिणो भारेण सह तोलतः ।  
जात्यहरिणमणेभारो निर्णेतव्यो मणीषिभिः ॥  
तद्भारतुलितेनैव लाघवात् काचो मन्यते ॥  
नीरपूर्णघटे क्षिसद्रव्यापसारितं हि यत् ।  
वारि तद्वस्तुना तुल्यमायतने जगुर्बुधाः ॥

(5)

The weight of a genuine emerald is to be ascertained as compared with that of water of the same dimension. The figure, thus obtained, is to be compared with that representing the weight of a piece of stone (to be tested), in relation to the weight

\* पुत्रिकेति नामान्तरम् ।

of water of the same dimension. If the second figure is much lower than the first, the stone tested is to be considered glass or something other than an emerald. The water displaced by an article immersed into a pot full of water is regarded to be of the same dimension as the article itself.\*

( ६ )

कस्यचिदनेकरूपैर्मरकतमनुगच्छतोऽपि गुणवर्णः ।  
भल्लातस्य निर्णेतुर्वैशद्यमुपैति वर्णस्य ॥

(6)

Some bhallata (a stone which possesses the colour and some other features of emerald) may appear to resemble a real emerald in colour and other features. The difference between such a stone and emerald can be known by a greater clearness of colour in the latter.

अथ माणिक्यम् ।

माणिक्यं शोणरलं च तरुणं लोहितं तथा ।

शृङ्गारो रविरलं च रङ्गमणिश्च रागयुक् ॥

तस्य भेदाः ।

माणिक्यं पद्मरागाख्यं द्वितीयं कुरुविन्दजम् ।

सौगन्धिकं तृतीयं स्यात् चतुर्थं नीबगन्धि च ॥

\* This is a clear reference to the ancient Indians having a knowledge of specific gravity.

कुशेशयदलच्छायं स्वच्छं स्त्रिग्धं महादुर्घति ।  
 वृत्तायतं समं गात्रं श्रेष्ठं तत् पद्मरागकम् ॥०  
 विज्ञेयं कुरुविन्दजमतिरक्तं सुशोभनम् ।  
 सुगन्धिकात् समुत्पन्नं सौगन्धिकं हि पीतभम् ॥  
 नोलगङ्गाम्बुसंभूतं नीलगर्भारुण्यच्छवि ।  
 मांसखण्डनिभं रूपैः कथ्यते नीलगन्धि तत् ॥  
 पद्मरागो भवेद्विश्रो वाहुजः कुरुविन्दजम् ।  
 सौगन्धिको भवेद् वैश्यो नीलगन्धि च शूद्रकः ॥

MANIKYA (RUBY).†

*Its variety.*

Manikya is of four kinds, viz. (1) padma-raga, (2) kuruvindaja, (3) saugandhika, and (4) nilagandhi.

The best of the former is lotus-coloured (i.e. white red), transparent, gladdening to the eyes, highly bright, round-shaped, smooth, and heavy.

Kuruvindaja, which grows from a stone named Kuruvindam (corundum), is highly red and beautiful.

Saugandhika, which grows out of sugandhika (spinel), is yellowish red.

Nila-gandhi is generally obtained from the bed of the river, Nila-ganga. ‡ It is red in colour with a bluish lustre emerging from inside.

\* गात्रमिति स्थूलम् ।

† “Ruby” is evidently a contraction of the Sanskrit “rabi-ratna” (i.e. the gem favourite to Ravi or the Sun).

‡ One of the tributaries of the river, Ganges, falling into it near Hardwar.

This classification of the rubies is in order of their excellence.

शस्त्रमाणिक्यस्य लक्षणम् ।

गुरुत्वं हिंग्धता चैव वैमल्यमतिरक्तता ।

स्वच्छता गात्रसाम्यं च दीप्तिश्च वृत्तरूपता ।

सर्वमेतद्विजानीयाच्छ्रस्त्रमाणिक्यलक्षणम् ॥

*Characteristics of good rubies.*

These are :—heaviness, softness, freedom from stains, excess of redness, transparency, smoothness and uniformity of structure, brilliance, and roundness of shape.

दुष्टमाणिक्यस्य लक्षणम् ।

( १ )

रन्धकार्कश्यमालिन्यरौचयावैश्यसंयुतम् ।

चिपिटं लघु वक्रं च माणिक्यं दुष्टमष्टधा ॥

*Defects of rubies.*

(1)

They are as follows :—holes, ugliness, absence of lustre, roughness, absence of transparency, flatness, lightness, and deformity of size.

( ३ )

छायाद्वितयसम्बन्धात् द्विच्छायं बन्धुनाशनम् ।  
द्विरूपं द्विपदं तेन माणिक्येन पराभवः ॥११  
सम्भेदो भिन्नमित्युक्तं शशाधातविधायकम् ।  
कक्षरं कक्षरायुक्तं पशुबन्धुविनाशकृत् ॥  
 दुर्घेनेव समालिसं पुटके यस्तु सम्भवेत् ।  
अशोभनं समुद्दिष्टं माणिक्यं बहुदुःखकृत् ॥  
 मधुबिन्दुसमच्छायं कोकिलं परिकीर्तितम् ।  
 आथुर्लङ्घमीं यशो हन्ति सदोषं तन् न धारयेत् ॥  
 रागहीनं जलं प्रोक्तं धनधान्यापवादकृत् ।  
धूम्रं धूमसमाकारं वैदुयतं भयमावहेत् ॥

(2)

A ruby with two different kinds of lustre in two different parts of its surface is a destroyer of friends to its wearer. A ruby with a mark resembling crow's foot gives rise to defeat. A crack in a ruby worn causes infliction of injuries by weapons. A ruby with a piece of pebble within it causes the destruction of cattle and friends. A ruby which appears to be coated with milk in a cavity in its body causes much distress. A ruby having the lustre of a drop of honey causes the loss of longevity, fortune, and fame.

\* द्विपदं काकपादमित्यर्थः ।

A ruby without lustre causes the loss of riches. A ruby with the colour of smoke threatens an accident by lightning.

माणिक्यस्य परीक्षा ।

अप्रणश्यति सन्देहे शिलायां परिघषयेत् ।

घृष्टो योऽत्यन्तशोभावान् परिमाणं न मुच्चति ।

स ज्ञेयः शुद्धजातिस्तु ज्ञेयाश्चान्ये विजातयः ॥

*Test of Ruby.*

A genuine ruby does not undergo any diminution in lustre, or in weight, even if rubbed with a hard stone. This is not the case with an artificial ruby.

श्रेष्ठपद्मरागस्य लक्षणम् ।

( १ )

भानोश्च भासामनुवेधयोगमासाद्य रश्मिप्रकरेण

दूरम् ।

पार्श्वानि सर्वान्यनुरञ्जयन्ति गुणोपपन्नाः रफ्टिक-

प्रसूताः ॥

*Characteristics of excellent Rubies.*

( १ )

It is a ruby of an excellent quality which endows its surroundings with brilliance when the sun's rays are reflected upon it. Such rubies grow from quartz.

( २ )

बालार्ककरसंस्पर्शात् यः शिखां लोहितां वमेत् ।  
रञ्जयेदाश्रयं वापि स महागुणउच्यते ॥

( २ )

It is a ruby of superior worth which, at the touch of the morning sun, vomits, as it were, red flames, or dyes its surroundings with a red lustre.

( ३ )

दुग्धे शतगुणे क्षिसो रञ्जयेत् यः समन्ततः ।  
वमेच्छिखां लोहितां वा पद्मरागः स उत्तमः ॥

( ३ )

It is an excellent ruby which reddens even a hundred times its weight of milk; or vomits red flames.

( ४ )

यो मणिर्दृश्यते दूराज्ज्वलदग्निसमच्छविः ।  
वंशकान्तिः स विज्ञेयः सर्वसम्पत्तिकारकः ॥

( ४ )

The gem which appears from a distance to be a blazing fire is called vansha-kanti. It is the giver of all wealth.

( ५ )

अन्धकारे महाघोरे यो न्यस्तः सन् महामणिः ।  
प्रकाशयति सूर्याभः स श्रेष्ठः पद्मरागकः ॥

( ५ )

The best ruby, if kept in dense darkness, illuminates the surroundings with its rays.

( ६ )

पद्मकोषे तु यो न्यस्तो विकाशयति तत्कणात् ।  
पद्मरागवरोह्येष देवानामपि दुर्लभः ॥

( ६ )

It is a ruby which is very rare even to the gods which, if put within a lotus, makes the latter put forth its blossoms immediately.

माणिक्यस्य परिमानम् ।

( १ )

गुञ्जाफलप्रमाणस्तु दशसप्तत्रिगुञ्जकान् ।  
पद्मरागस्तुलयति यथापूर्वं महागुणः ॥

*Weight of rubies.*

( १ )

A ruby of the shape of a gunja should be 10, 7, or 3 gunjas in weight. The first is better than the second, and the second is better than the third.

( २ )

क्रोष्टुकोलफलाकारो द्वादशाष्टाब्दिगुञ्जकान् ।  
पद्मरागस्तुलयति यथापूर्वं महागुणः ॥

( २ )

A ruby of the shape of a shrigala-kola (jackal plum) weighs 12, or 8, or 7 gunjas. Of these three, the first is more valuable than the second, and the second is more valuable than the third.

( ३ )

बद्रीफलतुल्यो यः स्वरदिग्वसुमाषकः ।  
तथा धात्रीफलस्त्रिंशद्विंशतिद्वयष्टमाषकः ॥

( ३ )

The ruby which is of the size of a sweet plum fruit should weigh 12, or 10, or 8 mashas. The one which is of the shape of an amalaki fruit should weigh 30, or 20, or 16 mashas.

( ४ )

बिम्बीफलसमाकारः पड्वसुदशतोलकः ।  
अतःपरं प्रमाणेन मानेन न च लभ्यते ॥  
यदि लभ्येत पुण्येन तदा सिद्धिमवाप्नुयात् ॥

( ४ )

A ruby which is of the shape of a bimbi fruit should weigh 6, 8, or 10 tolas. A ruby of a greater weight and dimension is not generally available.

चतुर्थोऽध्यायः ।

२०६

माणिक्यस्य गुणः ।

माणिक्यं दीपनं वृष्यं कफवात्क्षयार्त्तिनुत् ।  
भूतवेतालपापन्मः कर्मजव्याधिनाशनम् ॥

*Properties of Ruby.*

A ruby (duly purified and incinerated) is an increaser of digestive power. It is nutritious and destroyer of kapha, vayu, and waste. It also does away with the evil influence exerted by ghosts and other evil spirits.

अथ मुक्ता ।

मौक्तिकं मुक्तिका मुक्ता लद्धमीर्मुक्ताफलं च तत् ।  
विन्दुफलं च भौतिकं तारा च जौवरलक्षम् ।  
अन्तःसारः शशिप्रिया चन्द्ररत्नं तदेव हि ॥

अस्या गुणः ।

( १ )

मौक्तिकं शीतलं लघु चक्षुष्यं बलपुष्टिदम् ।  
कपायं तदेव स्वादु स्त्रीकान्तिरतिवर्ज्जिती ॥  
कफपित्तक्षयध्वंसि कासश्वासाश्विमान्यनुत् ।  
कान्तिदं वृष्यमायुष्यं भेदि दाहविषप्रणृत् ॥  
वारिधिगर्भसंजातं मौक्तिकं खलु वीर्यदम् ।  
दीपि च पक्तिरोगाणां नाशकं ज्ञायते हि तत् ॥

*Mukta (Pearl).*

## Properties of Mukta.

Pearl is cool, beneficial to eye-sight, giver of strength and nutrition. It is astringent, sweet, and increaser of beauty and affection in women. It pacifies an excess of vayu and pittam, and is efficacious in cough, asthma, and loss of the power of digestion. It increases beauty, vitality, and longevity. It is laxative and efficacious in inflammation and poison.

Pearls growing in the sea (viz. oyster-pearls, conch-pearls, and fish-pearls) are increaser of the power of digestion and pacifier of all the diseases affecting the digestive organs.

अस्या भेदाः ।

द्विपेन्द्रभेदेन्द्रवराहशङ्खमत्स्याहिशुक्त्युज्ज्व  
वेणूजानि ।  
मुक्ताफलानि प्रथितानि लोके तेषां तु शुक्त्युज्ज्वमेव  
भूरि ॥

*Varieties of Pearls.*

Pearls grow in the following :—elephant, frog, boar, conch, fish, oyster, and bamboo.

( क ) गजमुक्ता ।

ऐरावतकुलजानां पुष्यश्रवणेन्दुसूर्यदिवसेषु ।  
ये चोत्तरायणभवा ग्रहणेऽकेन्द्रोश्च भद्रेभाः ॥

तेषां किल जायन्ते मुक्ताः कुम्भेषु सरदकोषेषु ।  
 बहवो वृहत् प्रमाणा बहुसंस्थानाः प्रभायुक्ताः ॥  
 नैषामर्दः कार्यो न च वेदोऽतीव ते प्रभायुक्ताः ।  
 सुतविजयारोग्यकरा महापवित्रा धृता राज्ञाम् ॥

(a) *Elephant-Pearl.*

Elephants of noble origin are those which are descendants of Airavata (owned by kings of Swarga in ancient times), and are born on a Sunday or Monday with the moon appearing to be in the fixed star of Pushya (in the sign of cancer) or Shravana (in the sign of capricorn), at that part of the year which begins after the Winter Solstice and ends with the Summer Solstice, and at a time of the eclipse of the sun or the moon. In the frontal globe on the fore-head or in the place of origin of the tusks of such an elephant grow several pearls of big size and varying structure. They are very bright. They should not be subjected to valuation, neither are they to be perforated. They are givers of sons, victory, and immunity from diseases. They should be worn by kings.

(ख) सर्पमणिः ।

फणिं मौक्किकं रस्यं नीलच्छायं महादुर्यतिः ।  
 शृगालकोलधातृकागुञ्जाफलप्रमाणकम् ॥

शस्तेऽवनीप्रदेशे रजतमये भाजने स्थिते च यदि ।  
वर्षति देवोऽकस्मात् तज्ज्ञेयं नागसम्भूतम् ॥

(b) *Snake-pearl.*

A snake pearl is beautiful, blue-lusted, and highly brilliant. It may be of three different sizes, viz, of the size of (1) jackal-plum, (2) amalaki fruit, and (3) gunja seed.

The test of genuineness of a snake-pearl is as follows :—

Keep it in a silver pot on a clean piece of open soil. If it is a genuine snake-pearl, it will cause immediately a shower of rain falling from the sky all on a sudden ; otherwise, there will be no such rainfall.

(ग) मीनमुका ।

( १ )

गुञ्जाफलसमस्थौल्यं मौक्किकं तिमिजं लघु ।  
पाटलापुष्पसंकाशमल्पकान्ति सुवर्त्तुलम् ॥

(c) *Fish-Pearl.*

( १ )

A fish pearl is as big as a gunja fruit. It grows in a kind of whale living in deep oceans. It is light in weight, and has the colour of a patala flower. It is not so bright and is very globular.

( २ )

तिमिजं मीननेत्राभं पूतं बहुगुणं वृहत् ।  
जायते तत् पयोनिधेमध्यचराननेषु वै ॥

( २ )

A fish pearl has the appearance of the eyes of a fish. It is sacred, endowed with several properties, and big in size. It grows in the mouth of whales growing in mid-ocean.

(b) वराहमुका ।

दंष्ट्रामूले वराहाणां शशिकान्तिनिभं हि यत् ।  
जायते मौक्किकं तच्चि बहुगुणं न संशयः ॥

(d) *Hog-Pearl.*

Pearls sometimes grow at the root of the teeth of some hogs. These pearls are as bright as the moon's rays. They possess several merits.

(c) वेणुमुका ।

वंशजं शशिसंनिभं हरिच्छ्रेतं हि तन् मतम् ।  
रोचना कोमला लघ्वी वंशजं गौरवाद् ददम् ॥

(e) *Bamboo-Pearl.*

A pearl growing inside a bamboo plant is as bright as the moon's rays. It is greenish white in colour. (It is to be distinguished from vansa-

lochana, a sugar-like substance, sometimes found inside the reeds of a bamboo plant). Vansa-lochana is soft and light, whereas a bamboo-pearl is strong and heavy.

(च) शङ्खमुक्ता ।

शङ्खजं शशिसंनिभं वृत्तं भ्राजिष्णु सुन्दरम् ।  
बृहत्कोलप्रमाणं तत् कपोताणुडसमं क्वचित् ॥

(f) *Conch-Pearl.*

A pearl growing in a conch-shell is as white as the moon. It is globular, bright, and beautiful. It is as big as a plum fruit, and sometimes, so big as the egg of a pigeon.

(छ) दुर्दरमुक्ता ।

भेकशीर्षे च जायन्ते मण्यो ये क्वचित् क्वचित् ।  
भौजंगममणेस्तुल्यास्ते विज्ञेया बुधोत्तमैः ॥

(g) *Frog-Pearl.*

The pearls which sometimes grow in the heads of frogs are like snake-pearls.

(ज) शुक्लमुक्ता ।

स्वात्यां स्थिते रवौ मेघैर्ये मुक्ता जलविन्दवः ।  
शीर्णाः शुक्लिषु जायन्ते ते मुक्ता निर्मलत्विषः ॥

सर्वेषु मौक्किकेषु हि हीनं स्याच् शङ्खशुक्तिजम् ।  
मौक्किकं जलधौ जातं वीर्यदं पक्षिरोगहा ॥

(h) *Oyster-Pearl.*

Rain drops, falling from the clouds at the time when the sun appears to be in the fixed star of swati (in the sign of Libra), if drunk by oysters, develop in course of time into bright pearls growing inside their shells.

Of all sorts of pearls, those which grow in oysters and conch-shells are inferior to the rest.

The pearls which grow in the ocean (*viz.* those growing in whales, conch-shells, and oyster-shells) are strengthening and efficacious in diseases relating to the digestive organs.

सर्वमौक्किकानां वर्णभेदः ।

ब्राह्मणस्तु सितः स्वच्छो गुरुः शुद्धः प्रभान्वितः ।  
आरक्तः क्षत्रियः स्थूलस्तथारुणोविभान्वितः ॥  
वैश्य आपीतवणोपि स्त्रिघः श्वेतः प्रभान्वितः ।  
शूद्रः शुद्धवपुः सूक्ष्मस्तथा स्थूलोऽसितदुर्यतिः ॥

*Classification of all the pearls according to colour.*

Pearls of the best type are clear, white, heavy, and bright. Those of the second class are thick, with tawny colour and brightness. Those of the third class are slightly yellow, appearing to be smeared

with oil, white, and bright. Those of the fourth class are white, small, thick, and have a black lustre.

शुभमौक्तिकस्य लक्षणम् ।

हादि श्वेतं लघु स्त्रिग्धं रश्मवन् निर्मलं वृहत् ॥  
ख्यातं तोयप्रभं वृत्तं मौक्तिकं नवधा शुभम् ॥

*Characteristics of good pearls.*

A goodpearl is agreeable to eye-sight, white, light, appearing to be smeared with oil, bright as sun's rays, big in size, praised by lookers-on, clear as water, and globular.

अपकृष्टमौक्तिकस्य लक्षणम् ।

रुद्धांगं नोज्ज्वलं श्यावं ताम्राभं लवणोपमम् ।  
अच्छशुभ्रं च विकटं ग्रन्थिलं मौक्तिकं त्यजेत् ॥

*Characteristics of bad pearls.*

Pearls of the following description are to be rejected :—coarse, devoid of brightness, tawny-coloured, having the colour of copper, resembling salt in appearance, half-white, ugly, and full of knots.

\* स्नेहेनैव विलिसं यत् तत् स्त्रिग्धमिति गद्यते ।

मौक्किकानां वेदः ।

शङ्खतिमिवेणवारणवराहभुजगभेकजान्यवेद्यानि ।  
अमितगुणत्वाच्चैषामर्घः शास्त्रे न निर्दिष्टः ॥

*Perforation of Pearls.*

Pearls, other than those which grow in oysters, should not be perforated. Neither should they be set a value to, on account of their scarcity.

अथ नीलम् ।

तुण्ड्राही तथा नीलं नीलाश्म सौरिरत्नकम् ।  
कलिङ्गे सिंहले जातं नीलोपलं शनिप्रियम् ॥  
नीलमणिद्विधा प्रोक्तं जलनीलेन्द्रनीलके ।  
शक्रनीलं तयोर्वरं कथ्यते रत्नकोविदैः ॥  
श्वैत्यगभितनीलाभं तज्जलनीलकम् लघु ।  
काषणगभितनीलाभं सभारं शक्रनीलकम् ॥  
रक्तगर्भाम्बुनीलं हि रक्तगन्धि विकथ्यते ।  
रक्तमुखी तदेव स्यात् जलनीलेषु तद् वरम् ॥

NILA (SAPPHIRE).

This stone, in ancient times, was procured from Kalinga (modern Orissa including the western part of Bengal) and Ceylone.

Nila is of two kinds, *viz.* Jala-nila and Indra-nila. Of these, the latter is better than the former. The sapphire which is comparatively light and emits a white lustre from inside is Jala-nila, whereas Indra-nila is comparatively heavy, and emits a black lustre from inside.

The Jala-nila which contains a red lustre inside it is called Racta-gandhi or Racta-mukhi nila. It is the best of the Jala-nilas.

श्रेष्ठेन्द्रनीलस्य लक्षणम् ।

एकच्छायं गुरु स्त्रिघं स्वच्छं पिण्डितविग्रहम् ।

मृदु मध्ये लसज्ज्योतिः सप्तगुणेन्द्रनीलकम् ॥

*Characteristics of a good Indra-nila.*

A good indra-nila is of uniform lustre, heavy, appearing to be smeared with an oily substance, transparent, globular, soft, with a play of brilliance inside it.

जलनीलस्य भेदाः ।

कोमलं विहितं रुद्धं निर्भारं रक्तगन्धि च ।\*

चिपिटाकृति+ सूक्ष्मं च जलनीलं हि सप्तधा ॥

\* कोमलमिति पञ्चवर्णम् । विहितमित्यर्थभागेन सम्पूर्णवण-  
मद्देवं कोमलम् ।

+ चिपिटाममिति पाठान्तरम् द्रष्टव्यम् ।

*Varieties of Jala-nila.*

Jala-nila is of seven kinds, *viz.* (1) that which has got a blending of five different kinds of colour, (2) that which has got a blending of five colours in the one half and only one colour in the other half, (3) that which does not appear to have an oily surface, (4) that which is light, (5) that which has got a play of red lustre inside it, (6) that which is flat-shaped (or, according to a different reading, has the glaze of a chipita or boiled rice baked and hammered into a flat-shape), and (7) that which is small-sized.

ताम्राभनीलमणिः ।

इन्द्रनीलो यदा कश्चित् विभर्त्यात्मवर्णताम् ।  
त्यजेन् न तत् तथा ताम्रौ करवीरोत्पलावुभौ ॥

*Copper-coloured sapphire.*

A sapphire which is copper-coloured should not be discarded. That is also the case with the two minor stones, *viz.* karabira and utpala (opal), even if they are copper-coloured.

इन्द्रधनुर्नीलम् ।

यस्य मध्यगता भाति नीलस्येन्द्रायुधप्रभा ।  
तदिन्द्रनीलमित्याहुर्महार्घ्यं भुवि दुर्लभम् ॥

*Rain-bow sapphire.*

The sapphire which has got a play of rain-bow, inside it, is very precious and rare in the earth.

महानीलम् ।

यस्तु वर्णस्य भूयस्त्वात् क्वारे शतगुणे स्थितः ।  
नीलतां तन्नयेत् सर्वं महानीलः स उच्यते ॥

*Maha-nila.*

The sapphire, which, on account of the abundance of its colour, can invest hundred times its weight of milk with a blue colour is called Maha-nila or great sapphire.

अथ गोमेदमणिः ।

गोमेदं राहुरलं च स्वर्भानवस्तमोमणिः ।  
पिङ्गलस्फटिकमेव तत् पीतमणिश्च कथ्यते ॥  
गोमेदः समरागत्वाद् गोमेदं रत्नमुच्यते ।  
गोमेदः प्रियकृद् राहोरीषत् पीतारुणप्रभः ॥

*Gomedam (zercon).*

It is a kind of quartz of a yellowish red colour. A gomeda (literally, cow's fat) is so called simply because it resembles beef's tallow in colour. This stone is of a reddish yellow colour.

गोमेदं परीक्षणीयम् ।

हिमालये वा सिन्धौ वा गोमेदमणिसम्भवः ।  
परीक्षा वह्निः कार्या शाणे वा रत्नकोविदैः ॥

*Zercon is to be tested.*

Zercon is found in the Himalayas and in the Sindhu (river Indus or province of Sind or the sea). The genuineness of this stone is to be tested by means of fire or by a whet-stone.

शस्तगोमेदम् ।

सुखच्छगोजलच्छायं स्वच्छं स्त्रिग्यं समं गुरु ।

निर्दलं मस्तुणं दीपं गोमेदं शुभमष्टधा ॥

*Good zercons.*

Zercons of the following description are good :—

- (1) having the colour of cow's urine which is very clear,
- (2) transparent,
- (3) appearing to be smeared with oil,
- (4) level-surfaced,
- (5) heavy,
- (6) devoid of layers,
- (7) smooth, and
- (8) bright.

अशस्तगोमेदम् ।

विच्छायं लघु रुक्षाङ्गं चिपिटं पटलान्वितम् ।

निष्प्रभं पीतकाचाभं गोमेदं न शुभावहम् ॥

*Zercon of bad qualities.*

These are as follows :—(1) devoid of secondary colour, (2) light, (3) rough-surfaced, (4) flat-shaped, (5) appearing to have a layer, (6) devoid of brightness, and (7) appearing to resemble glass of yellow colour.

गोमेदस्य छाया: ।

सर्वेषां मणिरत्नानां ज्ञायते ब्रुधसत्तमैः ।

छाया चतुर्विधा श्वेता रक्ता पीताऽसिता तथा ॥

गोमेदं पीतरक्ताभं प्राधान्येन प्रदृश्यते ।

छाया चतुर्विधा तस्मिन् दृश्यते नात्र संशयः ।

*Secondary Colours of Gems.*

Every gem has any of the following sub-colours (in addition to the predominant one) :—(1) white, (2) red, (3) yellow, and (4) black. This is also the case with zercons.

Zercon is principally of reddish yellow colour ; but it must have, in addition, any of the four sub-colours mentioned above.

प्रशस्तगोमेदम् ।

गुरुः प्रभाद्व्यः सितवर्णरूपः क्षिण्डो मृदुवर्वाऽथ  
महापुराणः ।  
खच्छस्तु गोमेदमणिर्धृतोऽयं करोति लद्मीं  
धनधान्यवृद्धिम् ॥

*Zercon of highly excellent qualities.*

Such a zercon is heavy, brilliant, white, appearing to be smeared with an oily substance, soft, or very ancient (i.e., one which was metamorphosed

long ago into its present state, from the state of a quartz), and transparent. Such a zircon is a giver of wealth and fortune to its wearer.

गोमेदस्य गुणाः ।

गोमेदं कफपित्तम् चयपारदक्षयंकरम् ।

दीपनं पाचनं रुच्यं त्वच्यं बुद्धिप्रबोधनम् ॥

*Properties of zircon.*

Zircon cures an excess of phlegm and pittam. It is beneficial in wasting diseases and anemia. It increases the power of digestion and appetite. It is beneficial to the skin.

अथ वैदूर्यम् ।

वैदूर्यमभ्ररोहं च वालवायजमं तथा ।

कैतवं कैतुरलं च प्रावृष्यमभ्ररोहकम् ॥

दूरजं च विदूरजं खराब्दांकुरकं च तत् ।

विलसदुत्तरीयकच्छायागर्भिं विद्यश्यते ॥

अविदूरे विदूरस्य गिरेरुचुङ्गरोधसः ।

कामभूतिकसोमानमनु तस्याकरोऽभवत् ॥

*Vaiduryam (Oriental cat's eye and similar stones).*

This stone used to be obtained from a mine close by the highest peak of the mount "Vidura", situated

on the border of a country named “Kama-bhuti”  
(Cambodia ?)

It appears to contain inside it a mark resembling  
a swinging scarf.

वैदूर्यस्य भेदः ।

( १ )

वैदूर्यं त्रिविधं ज्ञेयं विदूरगिरिसम्भवम् ।

कृष्णपीतं तथा नीलरक्तं च श्यामशुभ्रकम् ॥

*Varieties of Vaidurya.*

This gem is of three different kinds, viz. (1) yellowish black, (2) reddish blue, and (3) white black.

( २ )

एकं वेणूपलाशकोमलरुचा मायूरकण्ठत्विषा

मार्जारेक्षणपिङ्गलच्छविजुषा ज्ञेयं त्रिधा छायया ।

यद्गात्रं गुरुतां दधाति नितरां स्तिं तु दोषोज्जितम्

वैदूर्यं विशदं वदन्ति सुधियः स्वच्छं च तच्छोभनम् ॥

( २ )

Vaiduryam is of three different kinds, viz. (1) of the colour of green bamboo leaf, (2) of the colour of peacock's neck, and (3) tawny-coloured like a cats' eye.

Of all these Vaiduryas, those which are commendable are heavy, smooth, devoid of the general defects (referred to before), pellucid, and transparent.

शस्तवैदूर्यस्य लक्षणम् ।  
 वैदूर्यं श्यामशुभ्राभं समं स्वच्छं गुरु स्फुटम् ।  
 ऋमच्छुभ्रोत्तरीयेण गर्भितं शुभमीरितम् ॥

*Characteristics of a good Vaiduryam.*

The Vaidurya, which is blackish-white, smooth-surfaced, transparent, heavy, bright, and appears to contain inside it a mark resembling a swinging scarf, is commendable.

अशस्तवैदूर्यस्य लक्षणम् ।  
 श्यामं तोयसमच्छायं चिपिटं लघु कर्कशम् ।  
 रक्तगर्भोत्तरीयं च वैदूर्यं नैव शस्यते ॥

*Characteristics of bad Vaiduryam.*

A Vaidurya of the following description is not commendable :—(1) black, (2) water-coloured (3) flat-shaped, (4) light, (5) rough, and (6) containing inside it a mark resembling a swinging scarf of red colour.

वैदूर्यस्य परीक्षा ।  
 घृष्टं यंदात्मना स्वच्छं स्वच्छायां निकषाशमनि ।  
 स्फुटं प्रदर्शयेदेतद् वैदूर्यं जात्यमुच्यते ॥

*Test of Vaidurya.*

The Vaidurya which gains in lustre, if rubbed with a touch-stone, is a genuine one.

वैदूर्यस्य गुणाः ।

वैदूर्यं रक्तपित्तम् प्रज्ञायुर्बलवर्द्धनम् ।

पित्तप्रधानरोगम् दीपनं मलमोचनम् ॥

*Properties of Vaidurya.*

Vaidurya cures hemorrhage; increases knowledge, longevity, and strength; cures diseases due to an excess of pittam; excites power of digestion, and is a laxative.

अथ वैक्रान्तम् ।

वैक्रान्तं दग्धहीरकं नीचवज्रं च ताम्रकम् ।

पुलकं ताम्ररत्नं च ताम्राश्म विकृतं तथा ॥

अष्टास्त्राष्टफलकः षट्कोणो मस्तूणो गुरुः ।

शुद्धमिथितवणैश्च युक्तो वैक्रान्त उच्यते ॥

## VAIKRANTA (GARNET).

Vaikranta has eight or six angles and eight facets. It is smooth, heavy, and has all sorts of colour, pure or mixed,

चतुर्थोऽध्यायः ।

२२७

वैक्रान्तस्य भेदाः ।

( १ )

श्वेतो रक्तश्च पोतश्च नीलः पारावतच्छविः ।

श्यामलः कृष्णवर्णश्च कर्वुरश्चाष्टधा हि सः ॥

*Varieties of Vaikranta.*

( १ )

Vaikranta is of the following different colours :—

(1) white, (2) red, (3) yellow, (4) blue, (5) pigeon-coloured, (6) green, (7) black, and (8) mixed.

( २ )

श्वेतपीतस्तथा रक्तो नीलः पारावतप्रभः ।

मयरकण्ठसदृशश्चान्यो मरकतप्रभः ॥

देहसिद्धिकरं कृष्णं पीते पीतं सिते सितम् ।

सर्वाधेसिद्धिदं रक्तं तथा मरकतप्रभम् ॥

शेषे द्वे निष्फले वज्र्ये वैक्रान्तमिति सप्तधा ॥

( २ )

Vaikranta is of the following colours :—(1) white, (2) yellow, (3) red, (4) blue, (5) pigeon-colour, (6) the colour of a peacock's neck, and (7) the colour of an emerald.

The black variety is beneficial to health ; the yellow one is to be used in the process for manufacturing gold ; the white one is to be used in the

process for manufacturing silver (vide the operations of mercury in Vol I). The red variety has an all-round utility. The remaining two, viz., the blue and the pigeon-coloured varieties, are abortive, and should, therefore, be avoided.

वैक्रान्तस्य गुणाः ।

( १ )

आयुःप्रदश्च बलवर्णकरोऽति वृष्यः ।

प्रज्ञाप्रदः सकलदोषगदापहारी ॥

दीप्ताभिष्कृत् पविसमानयुणस्तरस्वी ।

वैक्रान्तकः खलु वपुर्वललोहकारी ॥

रसायनेषु सर्वेषु पूर्वगण्यः प्रतापवान् ।

वज्रस्थाने नियोक्तव्यो वैक्रान्तः सर्वदोषहा ॥

*Properties of Vaikranta.*

(I)

Vaikranta increases longevity, strength, complexion, nutrition, knowledge, and appetite. It removes all the three doshas and the diseases. It has almost the same properties as diamond. It makes the body as strong as iron. As a rasayanam, the white one is the best. A vaikranta, devoid of all the defects, may be used in lieu of diamond.

( २ )

वैक्रान्तो वज्रसहशो देहलोहकरो मतः ।  
विषमो रसराजश्च ज्वरकुष्ठक्षयप्रणुत् ॥

( २ )

Vaikranta, like diamond, strengthens the body, and cures poison, fever, leprosy, and phthisis. It is also a king of the metallic drugs.

वैक्रान्तस्योत्पत्तिस्तम् ।

विन्ध्यस्य दक्षिणे भागे ह्य तरे वाऽस्ति सर्वतः ।  
विकृन्तयति लोहानि तेन वैक्रान्तकः स्मृतः ।  
वज्रलक्षणसंयुक्तो दाहघातसर्वाहिष्णुस्तत् ॥

*Mines of Vaikranta.*

Vaikranta is obtained in several parts of the world, and especially in mines situated on the north and south of the Vindhya Hills.

The stone is so named, only because it can cut into pieces all sorts of metals. (The root from which the word has been derived, viz. "krit," means to cut.)

It has many of the characteristics of diamond, and can stand heating and percussion.

वैक्रान्तस्य शोधनम् ।

प्रथमोविधिः ।

वैक्रान्तकाः स्युल्लिदिनं विशुद्धाः  
संस्वेदिताः क्षारपटूनि दत्त्वा ।

अम्लेषु मूत्रेषु कुलत्थरम्भा-  
नीरेऽथवा कोद्रववारिपक्वाः ॥

*Purification of Vaikranta  
First process.*

Vaikranta is purified, if it is boiled for one day each with a solution of ksharas and salts dissolved with (1) the amlas (vegetable acids) (2) urines, and (3) decoction of kulattha, respectively.

It may also be purified, if boiled with a decoction of kodrava (a kind of grass-paddy).

द्वितीयोविधिः ।  
कुलत्थकाथसंस्वन्नो वैक्रान्तः परिशुद्ध्यति ।

*Second process.*

Vaikranta is purified, if it is boiled for 3 days with decoction of kulattha.

तृतीयोविधिः ।  
प्रशस्तं दग्धहीरकं धमापितं सप्तवारतः ।  
निर्गुणिङ्कारसे चिपेत् प्रक्षाल्य स्वच्छवारिणा ।  
शुद्धिमायाति तेन तत् तत्स्तत्त्वं विमारयेत् ॥

*Third process.*

Vaikranta is purified, if it is heated for seven times, and immersed each time in the juice of nirgundi, and then washed off with clear water.

चतुर्थोऽध्यायः ।

२३१

चतुर्थोविधिः ।

१६४ पृष्ठे तृतीयोविधिर्द्वयः ।

### Fourth process.

See Process No. III, page 194.

यैक्रान्तस्य मारणम् ।

प्रथमोविधिः ।

गन्धकं मर्दयेत् सम्यग् निम्बुद्रवेण खल्वके ।

वैक्रान्तं म्रियते पुटैरष्टाभिस्तेन लेपितम् ॥

*Incineration of Vaikranta.*

### First process.

Vaikranta is incinerated, if it is heated by putam for eight times, after having been smeared each time with a paste made of sulphur, rubbed well with lime juice.

द्वितीयोविधिः ।

१६४ पृष्ठे तृतीयोविधि द्वयः ।

### Second process.

See Process No. III, page 194.

तृतीयोविधिः ।

वैक्रान्तेषु च तप्तेषु हयमूत्रं विनिक्षिपेत् ।

पौनःपुन्येन वा कुर्यात् द्रवं दत्त्वा पुटेदनु ।

अनेनैव प्रकारेण म्रियते दग्धहीरकम् ॥

### Third process.

Vaikranta is incinerated, if it is heated by putam as many times as necessary, after having been heated each time in the ordinary way and immersed in the urine of horse.

चतुर्थोविधिः ।

हयमूत्रेण ताम्राश्म सेच्यं तप्तं त्रिसप्तधा ।  
 ततश्चोक्तरवारुण्याः पञ्चाङ्गे गोलके चिपेत् ॥  
 रुद्धा मूषापुटे पाच्यमुद्धृत्य गोलके पुनः ।  
 चिप्त्वा रुद्धा पचेदेवं यावत् तद्भस्मतां ब्रजेत् ॥

### Fourth process.

Vaikranta is to be heated and immersed at once in the urine of horse. This process is to be performed for 21 times. The stone is then to be kept inside a lump made of the five different parts (viz. root, leaves, bark, flower, and fruit) of an indra-baruni plant. The lump is then to be confined within a crucible and heated. The stone is next to be kept again inside a lump made in the same way as stated above, put into a crucible, and heated as before. The process of heating in crucibles is to be repeated as many times as are found necessary for the incineration of vaikranta.

वज्रस्थाने वैक्रान्तस्य व्यवहारः ।

भस्मीभूतं हि वैक्रान्तं वज्रस्थाने नियोजयेत् ।  
मोक्षमोरटपालाशत्वारगोमूत्रभावितम् ॥९

*Use of garnet in place of diamond.*

Incinerated garnet is to be subjected to bhavana with cow's urine mixed with a kshara of the following trees :—moksha, morata, and palasha.

वैक्रान्तस्य सत्त्वपातनम् ।

( १ )

वज्रकन्दनिशाकलकफलचूर्णसमन्वितम् ।  
तत्कलकं टंकणं लाढाचूर्णं वैक्रान्तसंभवम् ॥  
नवसारसमायुक्तं मेषशृङ्गीद्रवान्वितम् ।  
पिण्डितं मूकमूषस्थं ध्मापितं च हठाग्निना ॥  
सत्तं पतति तत्रैव वैक्रान्तस्य न संशयः ।

*Extraction of essence of Vaikranta.*

( १ )

Tuber of shurana, haridra, powdered madana fruit, tankana, powdered laksha (lac insects), ashes of vaikanta, navasara—all these are to be rubbed with decoction of meshashringi and made into a lump, which is to be dried, confined in a blind (or

\* मोरटं लताकराड़ इति भाषा ।

dumb) crucible, and then heated by a very strong fire. This will result in the issuing of essence which will be found in the crucible.

( २ )

सत्त्वपातनयोगेन मर्दितश्च वटीकृतः ।  
मूषास्थो घटिकाध्मातो वैक्रान्तः सत्त्वमुत्सृजेत् ॥

( २ )

Essence of Vaikranta can be extracted, if the ashes of vaikranta are mixed with the materials required for extraction of essence of all things (see page 47, Vol. II) and heated in a crucible.

वैक्रान्तस्य प्रयोगः ।

( १ )

भस्मत्वं समुपागतो विकृतको हेष्टा मृतेनान्वितः +  
पादांशेन कणाज्यवेष्टसहितो गुञ्जामितः सेवितः ।  
यच्चमाणं जठरं च पाण्डुगुदजं श्वासं च कासामयम्  
दुष्टां च प्रहणीमुरःक्षतमुखान् रोगान् जयेद्देहकृत् ॥

*Uses of Vaikranta.*

( १ )

Incinerated vaikranta with one fourth its quantity of incinerated gold, taken in doses of one racti

\* २४ खण्डे ४७ पृष्ठं द्रष्टव्यम् ।

† विकृतक इति वैक्रान्तम् ।

a day with a little of powdered pippali, clarified butter, and powdered biranga, cures phthisis, diseases affecting the belly, anemia, fistula, piles, asthma, cough, chronic diarrhoea, cavities or ruptures in the lungs, etc. It strengthens the body as well.

( २ )

सूतभस्माद्वं संयुतं नीलवैक्रान्तभस्मकम् ।  
 मृतात्रसल्लवमुभयोस्तुलितं परिमिर्दितम् ॥  
 क्षौद्राज्यसंयुतं प्रातर्गुञ्जामात्रं निषेवितम् ।  
 निहन्ति सकलान् रोगान् दुर्जयानन्यभेषजैः ।  
 त्रिसप्तदिवसे नृणां गङ्गाम्भ इव पातकम् ॥

( २ )

Two parts of incinerated vaikranta of blue colour, one part of incinerated mercury, and three parts of incinerated mica are to be rubbed together. This medicine, taken in doses of one racti a day early in the morning, with a little of honey and clarified butter, cures, in 21 days only, all the diseases incapable of being cured by other medicines.

अथ स्फटिकम् ।

स्फटिकं स्फाटकं स्वच्छं भासुरं स्फटिकोपलम् ।  
 धौतशिला सितोपलं शालिषिष्ठं शिवप्रियम् ॥

निर्मलोपलकं स्वच्छमणिश्चामररत्नकम् ।  
निस्तुष्टरत्नमेव तत् जायते रत्नकोविदैः ॥

स्फटिकस्य भेदाः ।

अशोकपल्लवच्छायं दाढ़िमवीजसंनिभम् ।  
विन्ध्याटवितटे देशे जायते मन्दकान्तिकम् ॥  
सिंहले जायते कृष्णमाकरे गन्धनीलके ।  
पद्मरागभवे स्थाने त्रिविधं स्फटिकं भवेत् ॥  
अत्यन्तं निर्मलं स्वच्छं निस्तुष्टं क्षिञ्चगात्रकम् ।  
ज्योतिर्ज्वर्लनमाश्लिष्टमुक्तं ज्योतीरसं हि तत् ॥  
तदेव लोहिताकारं राजावर्तमुदाहृतम् ।  
आनीलं तत्तु पाषाणं प्रोक्तं राजमयं शुभम् ॥  
ब्रह्ममूत्रमयं यत्तु प्रोक्तं ब्रह्ममयं हि तत् ॥

*Varieties of Sphatika (Quartz).*

Quartzes are of several varieties. The *mandakanti* or lack-lustre quartz grows in the forests in the Vindhya hills. They have the colour of green tendrils of asoka tree or of pomegranate seeds. The *black* variety grows in mines of sapphire in Ceylon.

In mines of emerald grow quartz of three different variety. All of them are very clear, transparent, and free from layers. A glare of light emerge from them. The general name for all these

sphatikas is “*jyoti-rasa*”. Of these three, the red variety is called “*rajavarta*” (see later); the bluish variety is called “*raja-maya*”, and that variety which has got marks like a sacred thread upon its surface is called the “*brahma-maya*”.

स्फटिकस्य गुणाः ।

स्फटिकः समवीयः स्यात् पित्तदाहार्त्तिशोषनुत् ।  
तस्याक्षमालिकाजपाद् धत्ते कोटिगुणं फलम् ॥

*Properties of Sphatika.*

It is neither cold nor warm. It is efficacious in pittam, inflammation, impurities of the blood, and wasting diseases. To count its beads in religious devotion is productive of much good.

स्फटिकनिर्मितजलपात्रस्य गुणाः ।

स्फटिके पेयपात्रे हि रक्तिं विमलं जलम् ।  
पवित्रं देहशोतलं पित्तस्य च विनाशनम् ॥

*Properties of water kept in a pot made of sphatika.*

Pure water, kept in a pot made of sphatika, is cool and pacifier of pittam.

अथ चन्द्रसूर्यकान्तौ ।

अमृतांशुकरप्रभं हैमाद्रिशिखरोद्भवम् ।

निर्मलं च प्रभायुक्तं स्फटिकं परिकीर्तितम् ॥

तपनस्यातपस्पर्शादुद्गिरत्यनलं हि यत् ।

सूर्यकान्तं विजानोयात् स्फटिकं रत्नसत्तमम् ॥

अमृतांशुकरस्पर्शात् स्ववत्येवामृतोदकम् ।

दुर्लभं तं महारत्नं चन्द्रकान्तं विदुर्बुधाः ॥

### THE SUN-STONE AND THE MOON-STONE.

The quartzes which grow in the peaks of the Himalayas are very clear and bright like the moon's rays. Of these, the variety which emits fire on the sun's rays being reflected upon it, is called the Surya-kanta (or sun's favourite). It is the best of all the gems. There is another variety of this quartz, called the Chandra-kanta (or Moon's favourite). This is also a very precious gem, and is very rare. On moon's rays being reflected upon it, drops of water of nectar-like potency are shed by it.

सूर्यकान्तस्य गुणः ।

रविकान्तो भवेदुष्णो निर्मलश्च रसायनः ।

वातश्लेष्महरो मेधः पूजनाद् रवितोषकृत् ॥

*Properties of Sun-stone.*

The Sun-stone is warm, clear, and rasayanam (preventer and curer of senility and diseases). It pacifies an excess of vayu and kapha (phlegm), and increases memory. The planet sun (i.e. its presiding Deity) is propitiated, if this stone is kept carefully.

चन्द्रकान्तस्य गुणः ।

चन्द्रकान्तस्तु शिशिरः स्त्रिघ्नः पित्तास्वतापनुत् ।

शिवप्रीतिकरः स्वच्छो ग्रहालक्ष्मीविनाशनः ॥

*Properties of the Moon-stone.*

The moon-stone is cool, appearing to be smeared with oil, pacifier of racta-pittam (hemorrhage) and inflammation. It is pleasing to Siva—the Great Deity, and is a remover of the malignant influence of the planets \* and misfortune.

चन्द्रकान्तोद्भवोदकस्य गुणः ।

चन्द्रकान्तोद्भवं वारि पित्तघ्नं विमलं स्मृतम् ।

*Properties of Moon-stone water.*

This water is absolutely pure and curer of excess of pittam.

\* Properly speaking, the planets do not exert any influence, good or bad, on human destiny. What they actually do is to indicate good or bad luck to human beings (by their peculiar configuration).

## अथ प्रवालम् ।

प्रवालं विद्रुमं ज्ञेयमंगारकमणिस्तथा ।  
 अम्भोधिवज्ज्वरं भौमरत्नंचैव लतामणिः ।  
 रक्ताङ्गं रक्तदेहं च जलधिगर्भकोटकम् ॥

अत्यं भेदाः ।

अरुणं शशरक्ताभं कोमलं स्त्रिगधमेव च ।  
 प्रवालं विप्रजातिः स्यात् सुखवेध्यं मनोरमम् ॥  
 जवाबन्धूकसिन्दूरदाढ़िमीकुसुमप्रभम् ।  
 अस्त्रिगधं कठिनं चैव दुर्वेध्यं चत्रमुच्यते ॥  
 पलाशकुसुमाभासं तथा पाटलस्त्रिभम् ।  
 वैश्यजातिर्भवेत् स्त्रिगधं वर्णाद्यं मन्दकान्तिमत् ॥  
 रक्तोत्पलदलाकारं कठिनं न चिरद्युति ।  
 विद्रुमं शूद्रजाति स्याद् नैव वेध्यं सुखेन तत् ॥

PRAVALAM (CORAL).

*Its varieties.*

The best of the corals is reddish-white in colour, like the blood of a hare. It is soft, with a surface appearing to be smeared with oil, beautiful, and is capable of being easily perforated. The second class of the corals is as red as red vermillion or the java,

bandhuka, or pomegranate flower. Such a coral is stiff and its surface does not appear to be smeared with oil. It is difficult to be perforated. The third class in merit of the corals is yellowish-red like palasha or pātala flower. It has a beautiful colour, but very little glaze. Its surface does not appear to be smeared with oil. The fourth class of corals, which is the least meritorious, is blackish-red like the petals of a red lotus flower. It is hard and its lustre does not last for a long time. It is very difficult to be perforated.

शस्त्रप्रवालानां लक्षणानि ।

रक्तता हिंग्घता दार्यं वृत्ताकृतिश्चिरद्युतिः ।

स्थौल्यं च वण्णराहित्यं प्रवालानां गुणा मताः ॥

*Characteristics of good corals.*

These are :—(1) redness, (2) appearing to be smeared with oil, (3) capacity for being perforated, (4) globular shape, (5) lastingness of the lustre, (6) thickness, and (7) smoothness of surface.

अशस्त्रप्रवालानां लक्षणानि ।

पाण्डुरं धूसरं दुष्टं \* सबणां कण्डरान्वितम् ।

निर्भारं शुल्ववर्णञ्च प्रवालं नेष्यते इष्टधा ॥

\* दुष्टमिति दोषयुक्तम् १६८ पृष्ठं द्रष्टव्यम् ।

*Characteristics of bad corals.*

Bad corals are pale-white, grey-coloured, small, rough-surfaced, full of cavities, light, and copper-coloured.

विद्रुमस्य कोमलत्वम् ।

नायसोऽस्त्रिख्यते रत्नं मौक्किकं विद्रुमं विना ॥

*Softness of corals.*

Of all the gems, only corals and pearls can be scratched upon by iron.

प्रवालस्य गुणाः ।

क्षयपित्तात्कासस्फ्रं दोषनं पाचनं लघु ।

विषभूतादिशमनं विद्रुमं नेत्ररोगनुत् ॥

*Properties of corals.*

Pravala is efficacious in phthisis, hemorrhage, cough, eye-disease, poison, and evil influences exerted by ghosts, etc. It is light and digestive.

अथ कर्केतम् ।

कर्केतनं च कर्केतं नखमणिश्च कथ्यते ।

कर्केतं श्रीप्रदं सम्यक् स्पर्शजगरनाशनम् ॥

*Karketam (chrysoberyl or chrysolite).*

Used internally as a drug, or externally as an article of jewellery, it brings to its user all sorts of

fortune and beauty. It is an antidote against infection from taking contaminated food or association with diseased persons.

कर्केतस्य भेदाः ।

वर्णेन तद्रुचिरसोममधुप्रकाशमातापीतदहनो-  
ज्ज्वलितं विभाति ।  
नीलं पुनः खलु सितं परुषं विभिन्नं भेदादिदोष-  
हरणेन न तद्विभाति ॥

*Varieties of karketana.*

Karketanam is of the following colours :—(1) blood-red, (2) moon-white, (3) honey-coloured, (4) having a tinge of the colour of copper, (5) yellow, (6) fire-coloured, (7) blue, and (8) pure white.

Of these, the last two, viz. blue and pure white, are coarse and full of cracks. They cannot therefore look bright even after removal of their defects.

कर्केतनस्य लक्षणम् ।

स्त्रिग्धा विशुद्धाः समरागिणश्च  
आपीतवर्णा गुरवो विचित्राः ।  
त्रासव्रणब्याधिविवर्जिताश्च  
कर्केतनास्ते परमाः पवित्राः ॥

*Characteristics of good karketana.*

Karketanas of the following description are commendable :—(1) oily-surfaced, (2) not mixed with foreign matters, (3) of uniform colour (4) having a tinge of yellow, (5) heavy, (6) having a play of more than one colour, and (7) devoid of such defects as crack, etc. (see page 169).

अस्य गुणाः ।

पत्रेण काञ्चनमयेन तु वेष्टयित्वा  
हस्ते गलेऽथ धृतमेतदतिप्रकाशम् ।  
रोगप्रणाशनकरं कलिनाशनं च  
आयुष्करं कुलकरं च सुखप्रदं च ॥  
एवंविधं बहुगुणं मणिमावहन्ति  
कर्केतनं शुभमलङ्घतये नरा ये ।  
ते पूजिता बहुधना बहुबान्धवाश्र  
मित्योज्ज्वलाः प्रमुदिता अपि ते भवन्ति ॥

*Properties of karketana.*

A bright karketana, if put on with a golden foil, causes the cure of diseases, does away with the possibility of troubles and anxieties, and increases longevity, children, and happiness.

Those who put on such a good gem acquire respect from people, riches, many friends, beauty, and good health.

अथ पुष्परागः ।

पीताश्म गुरुरत्नं च वाचस्पतिप्रियस्तथा ।  
 पीतरत्नं प्रसूनाभो मञ्जुमणिश्च पीतकम् ।  
 पुष्परागो हरिद्राभं पिङ्गलस्फटिकमेव च ॥  
 पुष्परागमणिर्द्विधा प्राप्तव्यो ज्ञायते बुधैः ।  
 पद्मरागाकरे कश्चित् कश्चित् ताढ्योपलाकरे ॥  
 ईषत् पीतं च वज्राभं स्वच्छं कान्त्या मनोहरम् ।  
 पुष्परागमिति प्रोक्तं चन्द्रसेनमहीभुजा ।  
 पुत्रधनप्रदः पुण्यः पुष्परागमणिर्धृतः ॥

PUSHPARAGA (TOPAZ).

Pushpa-raga can be obtained in two different kinds of mines, viz. in mines of ruby and in those of emeralds. Pushparaga, according to king Chandra Sena, the chemist,\* is yellowish, transparent, and bright like a diamond. It brings son and wealth to its wearer.

रत्नान्तरेण्यः पुष्परागस्य विभेदः ।  
 आपीतपाण्डुरुचिरः पाषाणः पुष्परागसंज्ञस्तु ।  
 कौरण्टकनामा स्यात् स एव यदि लोहितापीतः ॥

\* For a brief history of Indian Chemistry, see Chapter III, page 46 of the author's book entitled " Indian Civilization and its Antiquity." — (Price Rs. 2. India).

आलोहितस्तु पीतः स्वच्छः काषायकः स एवोक्तः ।  
 आनीलशुद्धवर्णः स्त्रिग्धः सोमालकः स्वगुणैः ॥  
 अत्यन्तलोहितो यः स एव खलु पञ्चरागसंज्ञः स्यात् ।  
 अपि चेन्द्रनीलसंज्ञः स एव कथितः सुनीलः सन् ॥

*Distinction of pusparaga from the other gems.*

The stone which is yellowish-pale and bright is called “pusparaga”. It is called “kaurantaka”, if it is yellowish-red in colour. It is called “kashaya”, if it is reddish-yellow and transparent. It is “somalaka”, if it is bluish white and smooth. The stone which is very red is a ruby, and that which is deep-blue is a sapphire.

पुष्परागाणां छायाः ।

छाया चतुर्विधा तस्य सिता पीताऽसिताऽसिता ।

*Sub-colours of Topazes.*

They are (1) white, (2) yellow, (3) pale-white, and (4) black.

शस्तपुष्परागस्य लक्षणम् ।

पुष्परागं गुरु स्वच्छं स्त्रिग्धं स्थूलं समं मृदु ।  
 कर्णिकारप्रसूनाभं मसूरणं शुभमष्टधा ॥

*Characteristics of good Topaz.*

A good topaz is heavy, transparent, appearing to have its surface smeared with an oily substance,

thick, well-shaped, soft, having the colour of a karnikara flower, and smooth.

अशस्तपुष्परागस्य लक्षणम् ।

( १ )

कृष्णबिन्दुं किं रुद्रं धवलं मलिनं लघु ।  
विच्छायं शर्करागारं पुष्परागं सदोषकम् ॥

( २ )

निस्प्रभं कर्कशं रुद्रं पीतं श्यामं नतोन्नतम् ।  
कपिशं कपिलं पारदु पुष्परागं परित्यजेत् ॥

*Characteristics of a bad Topaz.*

( १ )

A defective topaz has got black spots on its surface, is rough, white, devoid of lustre, light, devoid of a sub-colour, and has sugar-like spots.

( २ )

A bad topaz is devoid of lustre ; it is coarse, rough, yellow, black, having an undulating surface, brown or reddish brown, tawny, and pale-white.

पुष्परागस्य गुणाः ।

पुष्परागं विषच्छर्दिकफवाताम्बिमान्यनुत् ।  
दाहकुषाखशमनं दीपनं पाचनं लघु ॥

*Properties of pushpa-raga.*

Pusppa-raga is efficacious in poison, nausea, excess of phlegm and vayu, loss of digestive power, inflammation, leprosy, and hemorrhage. It is easy to digest.

## अथ राजावर्त्तः ।०

( १ )

राजावर्त्तोऽल्परक्तोरुनीलिकामिश्रितप्रभः ।

गुरुश्च मसूरणः श्रेष्ठस्तदन्यो मध्यमः स्मृतः ॥

RAJAVARTA (QUARTZ AMETHYST—  
LAPIS LAZULI).

( १ )

The best type of this stone (which is a kind of quartz) has a blue colour with an admixture of slight red. It is heavy and smooth. Rajavartas of different description are inferior to these.

( २ )

निर्गारमसितमसूरणं नीलं गुरु निर्मलं वहुच्छायम् ।  
शिखिकरठसमसौम्यं राजावर्त्तं वदन्ति जात्यमणिम् ॥

( २ )

A genuine rajavarta is devoid of dirt, devoid of whiteness, smooth, blue, heavy, clear, having various sub colours, and beautiful like the neck of a pea-cock.

\* एष एव स्फटिकभेदः । २३६ पृष्ठं द्रष्टव्यम् ।

चतुर्थोऽध्यायः ।

२४६

राजावर्त्तस्य गुणाः ।

( १ )

प्रमेहदूषदुर्नामपागडुश्लेष्मानिलापहः ।

दीपनः पाचनो वृष्ट्यो राजावर्त्ते रसायनः ॥

*Properties of Rajavarta.*

( 1 )

Rajavarta is efficacious in gonorrhoea, waste, piles, anemia, phlegm, and vayu. It increases the power of digestion ; is nutritious and curer and preventer of diseases and senile decay.

( २ )

राजावर्त्ते गुरुः स्निग्धो शिशिरः पित्तनाशनः ।

सौभाग्यं कुरुते नृणां भूषणेषु प्रयोजितः ॥

( 2 )

Rajavarta is heavy, smooth, cool, and pacifier of pittam. It brings fortune to its wearer.

राजावर्त्तस्य शोधनम् ।

प्रथमोविधिः ।

निम्बुद्रवैः सगोमूत्रैः सक्षारैः स्वेदिताः खलु ।

द्वित्रवारेण शुध्यन्ति राजावर्तादिप्रस्तराः ॥

*Purification of Rajavarta.*

**First process.**

Rajavarta and similar stones are purified, if they are boiled for two or three times with lemon juice mixed with cow's urine and ksharas.

द्वितीयोविधि: ।

शिरीषकुसुमाद्र्द्धकरसेन भावितोऽथवा ।  
द्रवेन तेन सुखिन्नो राजावत्तो विशुद्धति ॥

**Second process.**

Rajavarta is purified, if it is subjected to bhavana with the juice of shirisha flower mixed with ginger juice, or if it is boiled with the same liquid.

राजावत्तस्य मारणम् ।

लुङ्गाम्बुगन्धकोपेतो राजावत्तो विचूणितः ।  
पुटनात् सप्तवारेण मृतो भवति निश्चितम् ॥

*Incineration of Rajavarta.*

Rajavarta is incinerated, if it is powdered and subjected to heat by putam for seven times, after having been rubbed each time with the juice of matulunga and sulphur.

राजावर्त्स्य सत्त्वपातनम् ।

राजावर्त्स्य चूर्णं तु कुनटीघृतमिश्रितम् ।

विषचेदायसे पात्रे महिषीक्षीरसंयुतम् ॥

सौभाग्यपञ्चगव्येन पिराडीवज्ज्वला तु कारयेत् ।

धमापितं खदिराङ्गारै सत्त्वं मुञ्चति शोभनम् ॥

*Extraction of essence of Rajavarta.*

Powdered rajavarta, mixed with manas-shila, clarified butter, borax, cow's milk, cow's curd, cow's urine, and cow's stool, is to be boiled with a sufficient quantity of buffalo's milk in an iron pot and made into a lump. This is to be heated by means of a fire made of khadira wood, resulting in essence of rajavarta coming out of the lump.

अनेन क्रमयोगेन गैरिकं विमलं तथा ।

क्रमात् पीतं च रक्तं च सत्त्वं त्यजति शोभनम् ॥

In this way, essences of yellow and red colour respectively, can be obtained from gairika (red ochre) and vimala (red pyrites).

अथ भीष्मरत्नम् ।

हिमाद्रिप्रतिबज्ज्वला हि शुद्धं भीष्ममणिं खलु ।

बिभर्ति श्रद्धया यस्तु स सर्वां भूतिमाप्नुयात् ॥

गुणयुक्तस्य तस्यैव धारणाद्वि यथाविधि ।  
 विषाणि खलु नश्यन्ति सर्वान्येव महीतले ॥  
 बाधन्ते तं न कुञ्जरसर्पादिहिंस्वजन्तवः ।  
 जलाम्बिदस्थुवैरिणां भीतिस्तस्य विनश्यति ॥

BHISMA-MANI (A KIND OF ANTI-  
 POISONOUS QUARTZ).

The man who wears a pure bhisma-mani, obtained from the Himalayas, acquires all sorts of objects of desire. The wearer of this gem becomes free from the effects of all sorts of poison. such ferocious animals as lion, snake, etc. can do him no mischief. He has nothing to fear from water, fire, robbers, and enemies.

अशस्तभीस्मरत्नम् ।  
 सैवालवलाहकाभं परुषं पीतप्रभं प्रभाहीनम् ।  
 मलिनद्युतिं विवर्णं दूरात् परिवर्जयेत् प्राज्ञः ॥

*Bhisma-manis, unfit for use.*

Bhisma-manis of the following description are to be avoided :—(1) Those which have the colour of moss ; (2) those which have the colour of the balahaka bird (a kind of crane) ; (3) rough, (4) yellowish, (5) devoid of lustre, (6) black-lustred, and (7) discoloured.

नीलमणेगुणाः ।\*

श्वासकासहरं वृष्यं त्रिदोषग्नं सुदीपनम् ।  
विषमज्वरदुर्नामपापग्नं नीलमीरितम् ॥

*Properties of sapphire.†*

A sapphire, duly incinerated, is a curer of asthma and cough. It is nutritious, pacifier of the three doshas, increaser of power of digestion, and destroyer of visama-jwara (malaria, black fever, etc.) piles, and vicious tendencies of the mind.

अथोपरक्षानि ।

विविधान्युपरक्षानि श्रेयस्तेषां तु सप्तकम् ।  
पालङ्कं रुधिरं पूर्ति तार्कजं पीलु चोपलम् ॥  
सुगन्धिकं च सप्तैतद् दामहीनानि तानि वै ।‡  
यत्कात् सर्वानि युज्यन्ते रसे रसायने तथा ॥

*Uparatnas (Amorphous stones).*

There are innumerable minor or amorphous stones. The best of all these are the following :—  
(1) palanka (onyx), (2) rudhiram (carnelian) (3)

\* पतदेव २२० पृष्ठे महानीलमित्येतस्यानन्तरं संनिवेश्यम् परन्तु  
प्रमादात् न तद् साधितम् ।

† This should have been inserted in page 220, after "maha-nila" or great sapphire.

‡ दामेति प्रकृत्या खण्डितं सविग्रहं दानेति भाषा ।

puttika (peridot), (4) tarkshajam (turquoise—biraja or peroja \*), (5) pilu (jade) (6) upalam (opal, chalcedony, and agate), and sugandhikam (spinel).

All of these are amorphous or uncristallized in shape. They are to be incinerated carefully, and applied in mercurial operations as well as in medicines.

### अथ पालङ्कम् ।

श्वेतलेखासमन्वितं कृष्णं पाषाणकं हि यत् ।  
 खिञ्चिं हि मस्त्रणं चैव पालङ्कं तत् प्रकीर्त्यते ॥  
 असितमसिताभासं तथा च धूमवर्णकम् ।  
 पालङ्कं त्रिविधं तत्तु संयुतं श्वेतरेखया ॥  
 रेखाणां केवलाऽथवा बह्वी तत्र प्रदृश्यते ।  
 धारणात् प्रचुरां श्रियं दत्ते स प्रस्तरः खलु ॥

### PALANKA (ONYX).

Palanka is a black stone with a white line drawn upon it. Its surface is smooth and appears to be smeared with oil. Palanka is of three different kinds, viz. black, pale-black, and ash-coloured. Each of them has a white and rope-like line drawn upon it. Sometimes there are more than one of such white lines.

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\* The Persian epithet "peroja" is evidently a contraction of the Sanskrit "biraja", meaning green as "biraja" (durva grass).

अथ रुधिरम् ।

इन्द्रगोपनिभं रक्तं शुकवक्त्रसमं रुचौ ।  
 मध्येनदुपाणडुरं शक्रनीलाभपटलं तथा ॥  
 गृहीतबहुमूर्त्तिकं विशुद्धवर्णसंयुतम् ।  
 प्रकटपीलुवन् मानाद् रुधिराख्यं हि रत्नकम् ॥  
 ऐश्वर्यकान्तिभूतिनां दाता तत् खलपरत्नकम् ।  
 पक्षमेतद्दु भवेद् वज्रसद्वसुन्दरच्छवि ॥

RUDHIRAM (CARNELIAN).

Rudhiram is as red as an insect, named indragopa (mukmuli), or the mouth of a shuka bird (a kind of parrot). The inner part of this gem is as white as the moon, and the sides have the colour of an indra-nilam. It has a pure colour, and it can be given several shapes. It has the weight of a fully grown pilu fruit. This stone, when fully developed, may take the colour of a diamond.

It brings wealth and beauty to its wearer.

अथ पूत्तिका ।

हरिद्वर्णं च पीताभा मरकतानुकारिणी ।  
 पूत्तिका पुत्रिका सा च कोमला च प्रभान्विता ॥  
 क्षौमेण वाससा घृष्टा दीसि॑ त्यजति पूत्तिका ।  
 दीसिरकतस्य हि घृष्ट्या क्षौमेण वद्धते ॥

## PUTTIKA (PERIDOTE).

Puttiqa is yellowish-green, and resembles emerald in colour. It is soft and bright. It can be distinguished from emerald by being rubbed with a silken cloth, which reduces its lustre, whereas an emerald becomes brighter, if rubbed in this way.

## अथ तार्क्षजम् ।

तार्क्षजं हरितश्यामं भस्माभहरितं तथा ।  
 तदेवातिकषायं च मधुरं दीपनं परम् ॥  
 स्थावरं जंगमं चैव तथा संयोगजं विषम् ।  
 तत्सर्वं नाशयेत् तथा शूलं भूतादिपीडनम् ॥

## TURKHAJA (TURQUOISE—BIRAJA).\*

Turkhaja is of two kinds, viz. greenish-black, and ash-coloured green. It is astringent, sweet, and digestive. It removes all sorts of poisons, organic, or inorganic, and is efficacious in colic and troubles due to evil spirits.

## अथ पीलु ।

मरकतसमो वर्णात् तत्प्रभारहितो मणिः ।  
 पीलुनामा स विज्ञेयो चीनजापप्रियो मतः ॥

\* Originally obtained from Turkey. The Persian name peroja is a contraction of Sanskrit, "biraja".

ज्ञानबुद्धिमतिस्थैर्यदायकोऽसौ मणिर्मतः ।  
रक्तिकामानतो देयं तद्भस्म शूलजे गदे ।

PILU (JADE).

This resembles an emerald in colour but not in brightness. The Chinese and the Japanese are specially fond of this stone. It is a giver of wisdom, intelligence, and stability of mind. Incinerated pilu, taken in doses of one racti a day, cures colic.

अथोपलम् ।

उपलं त्रिविधं ज्ञेयं मर्मराश्म वरोपलम् ।  
तथा रुधिरपालङ्कं सर्वं दामविवर्जितम् ॥  
मर्मरं समवर्णं हि वरोपलं तथैव च ।  
मर्मरे न प्रभा काऽपि वरोपलं बहुप्रभम् ॥  
ख्यातं रुधिरपालङ्कं बहुवर्णं बहुस्तरम् ।  
छायाहीनं तदेव तु विचित्रवर्णचित्रयुक् ॥  
शेतकृष्णविमिश्रितं धूम्रं च हरितं सितम् ।  
मर्मरं दृश्यते ऽथवा वर्णान्तरसमायुतम् ॥  
पाषाणं सितमर्मरं कर्पूरमणिरुच्यते ।  
सितं नोलसितं कृष्णं रक्तं चेन्द्रधनुर्निर्भम् ।  
वर्णेन छायया चैव दृश्यते हि वरोपलम् ॥  
दामहीनमणीनां च कृष्णं भ्रमरमुच्यते ॥

**UPALAM (CHALCEDONY, OPAL,  
AND AGATE.)**

It is a general name given to three different kinds of stones, viz. marmarashman (chalcedony), baropala (opal), and rudhira-palanka (agate)—all of these are amorphous or uncry stallized.

Chalcedony as well as opal has one uniform colour, but the former has no sub-colour or radiance, whereas opal has various sub-colours. Agate has several colours and several layers. It has no sub-colours, but it has variety of colours and figures impressd upon it. Chalcedony or marble stone has only one of the following colours :—White-black, smoky, green, white, etc. White variety of chalcedony is called “karpura-mani” or camphor-stone. Opal has any of the following colours :—White, bluish-white, black, red, rain-bow-colour. Each opal may have one or more of these as sub-colour.

The black variety of all the amorphous stones is called “bhramara-mani” or black-bee stone.

अथ सुगन्धिकम् ।

बहुविधं सुगन्धिकं नीलं कृष्णं च लोहितम् ।

वर्णान्तरयुतं वापि सर्वं पीतप्रभात्वितम् ॥

स्वच्छं वज्रसमाकारं सुदृशं प्रस्तरं हि तत् ।

माणिक्यनीलरत्नानामाकरे जायते हि तत् ॥

SUGANDHIKAM (SPINEL).

Sugandhikam is of various colours, viz. blue, black, red, etc. Each of these stones has a yellowish sub-colour. It is transparent, beautiful, and of the shape of a diamond. It grows in mines of rubies and emeralds.

उपरक्षानां सामान्यगुणाः ।

उपरक्षं वरं यत् तु तत् किञ्चित् सूयते फलम् ।  
ईषद्वरक्षगुणं तत् तु विभर्तीति विदां मतम् ॥४

*General Properties of Amorphous Stones.*

The amorphous stones, if devoid of defects, are regarded to have a part of the properties of the gems (see page 195).

\* १६५ पृष्ठे रक्षानां सामान्यगुणाः द्रष्टव्याः ।

## पञ्चमोऽध्यायः ।

अथ क्वाराः ।

क्वरति यो मलं शीघ्रं तत्क्वार इति उच्यते ।  
 क्वारत्रयं समाख्यातं यावस्वर्जिकटंकनम् ॥  
 टंकनोषरकं चापि यवक्वारश्च स्वर्जिका ।  
 क्वारचतुष्टयमेतद् परिचितं सदा मूवि ॥  
 पलाशमोक्षक्वारौ यवक्वारः सुवर्चिका ।  
 तिलनालोऽज्ञवः क्वारश्चैतानि क्वारपञ्चकम् ॥  
 स्वर्जिटंकनमूषरं त्रितयं भौममुच्यते ।  
 लभ्यन्ते तानि मृन्मध्यात् क्वारपाकक्रियाकरैः ॥  
 अन्ये तु सकलाः क्वारा भस्मजसंज्ञिताः खलु ।  
 नवसारोऽपि विज्ञेयः क्वारोत्तमो मनीषिभिः ॥  
 द्रव्याद्धि पच्यमानात् तज्जायते इति पाकिमः ।  
 सूतगुणांशसंपर्कात् स एवोपरसो मतः ।  
 पलाशाश्वत्थमोक्षजा धवस्नूहीमयूरजाः ।  
 चनवृक्षार्कपत्रकचिंचाफलकोषोऽज्ञवाः ॥

तिलनालसमुत्पन्नो यवशूकोद्भवोऽपि च ।  
 वासापत्रोद्भवश्च यो दुरालभाभवश्च वै ॥  
 व्याघ्रीमूलकचित्रकपुनर्णवार्द्धजाश्च ये ।  
 एते सर्वे प्रयोजिता भेषजेषु यथाविधि ॥  
 अन्येभ्यो बहुवृक्षेभ्यो लतागुल्मतुणादितः ।  
 क्षारो संजायते सम्यग् वद्यमानविधानतः ॥  
 यावस्वर्ज्यूषराश्चैव पाकिमं टंकनं तथा ।  
 पञ्चैतत् क्षारवर्गेषु विख्यातं चितिमण्डले ॥

## CHAPTER V.

### *Ksharas (Alkalies).*

The word “kshāra” is derived from the root “kshar”, meaning “to remove”. The word is so named, simply because it removes dirt.

The following are the three ksharas :—(1) java-kshara (a potassium carbonate prepared from the ashes of barley-ears), (2) swarji (refined natron), and (3) tankana (borax).

The following are the four ksharas :—(1) swarji (refined natron), (2) ushara (sora—saltapetre—a sodium nitrate), (3) java-kshara, and (4) tankana.

The following are the five ksharas :—(1) kshara prepared from palasha wood, (2) that from mokshaka (ghanta pātali) wood, (3) java-kshara, (4) swarji kshara, and (5) the kshara obtained from the tila (sesamum) plant.

Of all the ksharas, only swarji, tankana, and ushara are obtained from the earth. The rest of the ksharas are extracted from ashes of wood, leaves, etc. of trees, plants, creepers, shrubs, and grass.

*Nava-sara* (sal-ammoniac) is also a kshara but it is generally classed with the uparasas, simply because it possesses, to a certain extent, some of the properties of mercury (See page 215, vol, II). It is also called “*pakima!*” (from root “*pach*”, meaning to putrefy), simply because it is obtained from materials in a state of putrefaction or decomposition.

Ksharas obtained from the following are also well-known and widely used:—trees or plants of the name of palasha, aswattha, ghanta-patali, dhava, snuhi, apamarga, chanaka-plant, arka, covers of tamarind beans, sesamum plant, ears of barley, basaka, duralabha, kantikari, mulaka (raddish), chitraka, punarnava, and ardraka (ginger).

There are many other trees, plants, shrubs, creepers, and grass from which ksharas may be prepared by the method to be described below.

Of all the ksharas, the most widely known are the following:—(1) *java-kshara*, (2) *swarji* (refined natron), (3) *usara* (nitre \*), (4) *nava-sara*, and (5) *tankana* (*borax*).

\* The colloquial Indian name for nitre is *sora* or *soraka*, which are the corrupted forms of the sanskrit *usara* and *usaraka*, respectively, all of these words being synonymous. Now, *usara* (or *usaraka*) is a word which has been in use in its present sense even from the pre-historic times. This word is to be found in every sanskrit dictionary, modern or ancient, and even in *sushruta*.

सामान्येन क्षाराणां गुणाः ।

( १ )

तीक्ष्णा उष्णाश्च दीपका लघवः क्लेदकास्तथा ।  
 दाहकाश्वेदनाश्चैव द्वाराश्च ज्ञायते त्रुधैः ॥  
 क्रिमिद्वा ब्रणदारणाः शोधनाः रोपनास्तथा ।  
 द्वारा मुखकराः सर्वे जानाति रसकौतुकी ॥

In this connection, it would be amusing to note how some of the Indian Allopaths, and their sympathisers, not conversant with sanskrit, which was the language of their fore-fathers and not caring to study the Indian system of medicine, sometimes rush into opinions which are simply ridiculous. Let us quote here a few lines from Dr. U. C. Dutt's "Materia Medica of the Hindus" (pp 89—90) :—

"Nitre was unknown to the ancient Hindus. There is no recognized name for it in sanskrit. \* \* \* Some ancient sanskrit formulas for the preparation of mineral acids containing nitre mention this salt under the name of "soraka". This word, however, is not met with in any sanskrit dictionary and is evidently sanskritized from the vernacular "sora", a term of foreign origin. The manufacture of nitre was therefore most probably introduced into India after the adoption of gun-powder as an implement of warfare."

These are the remarks made by an Indian Allopath who wrote a book on the *materia medica* of the Hindus, without acquiring an adequate knowledge of the subject. This indicates a state of things which occurs probably in India alone.

The domga that nitre was unknown to the ancient Hindus is not based on facts. It will be evident from a passage (quoted by Dr. Sir P. C. Roy in his History of Hindu Chemistry, (Vol. I,— pp. 184-185, footnote) in a work entitled. "The Travels of John Albert de Mandelso from Persia into the East Indies, London 1669," that salt-petre used to be manufactured in the middle ages, at the latest, in large scales in India whence it was brought into Europe.

We propose to prove elsewhere that the use of gun-powder was quite known to the Hindus even at the time of the composition of the oldest portion of the *Vedas*.

गुलमाशोघ्रहणीदोषशर्कराश्मरीनाशनाः ।

क्षारास्तु पाचनाः सर्वे रक्तपित्तकराः स्मृताः ॥

( २ )

शब्दानुशस्त्रेभ्य क्षारः प्रधानतमश्लेष्यभेद्यलेख्य  
करणात् त्रिदोषमत्वाद् विशेषक्रियावचारणात् ।  
नानौषधिसमवायत्वात् त्रिदोषमः । स खल्वाग्नेयौ-  
षधिगणभूयिष्ठत्वात् कटुक उषणस्तीक्षणः पाचनो  
विलयनः शोधनो रोपणः शोषणः स्तम्भनो  
लेखनः क्रिस्यामकफकुष्टविषमेदसामुपहन्ता पुंस्त्वस्य  
चातिसेवितः ।

*General Properties of the ksharas.*

( १ )

The ksharas are acrid, warm, increasers of appetite, light, moistening, causing inflammation, reducers of phlegm, destroyers of worms, openers of boils, and cleansers and healers of sores.

The man who is conversant with the mercurial operations knows that ksharas give rise to hunger in mercury. The ksharas are efficacious in gulma, piles, chronic diarrhoea, diabetes, and stone disease. They are digestive and increaser of hemorrhage.

( २ )

The ksharas are better than surgical instruments in as much as the former, like the latter, can serve

the purpose of incision, tapping, and scratching ; and unlike the latter, can remove the three doshas, and have several other utilities as well. The ksharas may be remover of the three doshas owing to their being combined with the necessary drugs. They, on account of their being prepared from several herbs with fiery qualities, are pungent, warm, strong, digestive, remover of tissues, etc., purifier of sores, causing granulation in sores, drier up, causing steadiness, reducer of fat ; and destroyer of worms, mucus, phlegm, leprosy, poison, and fat. They also destroy manly vigour, if taken in excess.

भस्मजक्षारनिर्माणस्य सामान्यविधिः ।

क्षारवृक्षादिजं काष्ठमथवा पत्रराशिकम् ।

शुष्कं सर्वं समाहृत्य वह्नौ प्रज्वालयेत् सुधीः ॥

नौत्वा तद्भस्म मृतपात्रे प्रस्थैकप्रमितं खलु ।

तत्र क्षिप्त्वा जलं शुद्धं द्रोणमानं विलोड़येत् ॥

ततस्तद्ध धारयेद् रात्रौ प्रातरच्छं जलं नयेत् ।

तज्जलं स्वावयेद् यत्तात् सप्तशः पृथुवाससा ॥

तन्नीरं काथयेद् वह्नौ यावत् सर्वं विशुष्यति ।

ततः प्रात्रात् समुज्जिख्य क्षारो याद्यः सितप्रभः ॥

चूर्णाभः प्रतिसार्यः स्यात् पेयः स्यात् काथवतस्थितः ।

इति क्षारद्वयं धीमान् युक्तकार्येषु योजयेत् ॥

*General Process of manufacturing kshara \*  
from ashes.*

The wood, leaves, etc. of an alkaline tree, plant, etc. are to be burnt to ashes. One prastha (64 tolas) of these ashes is to be dissolved with 16 times its weight of water which is to be allowed to settle for about 12 hours. The clearest part of the solution is next to be filtered for seven times through a piece of thick cloth. The water, thus filtered, is next to be heated till the whole thing gets dried up. The white-coloured solid product is then to be taken out and kept carefully. The solution, just before it is solidified, is a liquid alkali, used for drinking (in special diseases according to directions found in Sushruta). The solid product is an alkali to be used for external application (according to the instructions given in Sushruta) and as an ingredient of medicines.

यवक्षारः ।

अस्य नामानि ।

यवक्षाराभिधः स हि क्षारोत्तमश्च कथ्यते  
यवाप्रजो यवापत्यं यवजो यवलासकः ।  
पाक्यश्च यवशूकज यावश्च यवनालजः ॥

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\* The word kshara has undergone a gradual process of transformation as follows :—khara—khari—kali—kili—alkili—alkali.

अस्य निर्माणविधिः ।

यवशूकोद्भवं भस्म स्रावयित्वा यथाविधिः ।  
पूर्वोक्तेन विधानेन द्वारो निर्मीयते जनैः ॥

### JAVA-KSHARA.

*Its preparation.*

Ashes of the ears of barley are to be dissolved with water, which is to be filtered and condensed by heating in the afore-said way. The product is java-kshara.

अस्य गुणाः ।

यवद्वारः कटुः स्निघो लघूषणसूक्ष्मवहिकृत् ।  
सारको मूत्रकारको वातश्लेष्मप्रशान्तिकृत् ॥  
आनाहप्रहणीपाण्डुगुलमार्शः श्वासशूलक-  
प्रीहृष्टदामरोगानां तथा शुक्रस्य नाशनः ॥  
ज्ञेयो वहिसमः द्वारो नियतं यवशूकजः ॥

*Its properties.*

Java-kshara is pungent, soft, light, capable of easily spreading through all parts of the system, digestive, laxative, discharger of urine, and pacifier of vayu and kapha. It is efficacious in the following diseases :—intestinal obstruction, chronic diarrhoea, anemia, tumour in the belly, piles, asthma, colic, enlargement of the spleen, heart diseases, and mucus.

It does away with semen and has the properties of fire.

पाकिमक्षारस्य गुणाः ।

सेदोग्नः पाकिमः क्वारो मूत्रवस्तिविशेधनः ।

*Properties of pakima (nava-sara).*

It reduces fat and purifies the kidneys.

भौमक्षाराः ।

(१) ऊषरक्षारः ।\*

अस्य निर्माणविधिः ।

गङ्गातीरमृदं वाऽपि लवणात्कं मृदन्तरम् ।  
 विलोब्य सलिले शुद्धे गालयेत् पृथुवाससा ॥  
 धारयेत् सलिलं तच्च रजन्यां मृदघटे सुधीः ।  
 तन्नीरं काथयेत् वह्नौ यावत् सर्वं विशुष्यति ॥  
 ततः पात्रात् समुज्जिख्य क्वारो प्राण्य सितप्रभः ।  
 ऊषरं कथ्यते तत्तु शिलाजतूषराभिधम् ॥

KSHARAS OBTAINED FROM THE EARTH.

(1) USARA OR SORA (SALT-PETRE).

Earth, taken out from the banks of the Ganges, or any other salty earth is to be dissolved with pure water and then filtered through a piece of

\* द्वितीयखण्डे १०४ पृष्ठे ऊषरार्थं शिलाजतु द्रष्टव्यम् ।

thick cloth. This water is next to be kept in an earthen pot for about 12 hours to settle. The clearest part of the solution is then to be taken out and heated till it gets condensed. The product, which is of white colour, is then to be taken out. It is called ushara or sora. It is the same thing as ushara shilajatu (vide page 104, Vol. II).

अस्य नामानि ।

ऊषश्रोषरकश्चैव सौवर्चलस्तथोषरः ।  
 रुचकं रुच्यकं पाक्यं तथाद्यं हृद्यगन्धकम् ॥  
 लवनस्वादप्राधान्याल् लवणं च विकथ्यते ।  
 ऊषसूतः स एव हि द्वारलवनकं तथा ।  
 ऊषराज् जायते मृदस्तस्मादूषरको मतः ॥

*Its names.*

Ushara or sora is also called "sauvarchala" salt, on account of its being of saline taste. It is both a kshara as well as a salt. It is called "ushara", simply because it grows out of ushara (salty) soil.

अस्य गुणाः ।

उषणोऽनिलम्भः प्रक्लेद ऊषद्वारो बलापहः ।  
 रोचको भेदकः स्त्रिग्धः सूक्ष्मश्च पित्तलो लघुः ॥

हर्षदो वह्निवर्जकश्रोदुगारशोधकस्तथा ।  
 विबन्धानाहशूलेपु गुलमामक्रिमिवायुषु ॥  
 ऊर्ध्वानिले विशेषेण शस्तः स्यादूषरो मतः ॥

*Its properties.*

Ushara is a pacifier of vayu. It is moistening, destroyer of strength, increaser of appetite, laxative, soft, easily capable of spreading throughout the whole system, a little increaser of pittam, light, increaser of laugh, digestive, and purifier of elching winds.

It is also efficacious in the following :—constipation, intestinal obstruction, colic, gulma, mucus, worms, and, especially, wind moving upwards.

**मिथक्षारः ।**

पूर्वोक्तेन मृदा साञ्च क्षारशिल्पी विमिश्रयेत् ।  
 तृणानां प्रचुरं भस्म क्षचिद् वा क्षारवृद्धये ॥  
 अनेन निर्मितः क्षारो मिथाभिधो विकथ्यते ।  
 स्वर्जिना सहितं चेत्थं तृणभस्म विमिश्रयते ॥

*Mixed kshara.*

Manufacturers of kshara sometimes mix with the mud, referred to above, a sufficient quantity of ashes of grass in order to increase the quantity of the kshara to be produced. The distilled solution of mud and ashes is to be heated, and condensed into a mixed kshara, in the manner described above.

## (२) स्वर्जिक्षारः ।

अस्य नामानि ।

स्वर्जिक्षारः सुवर्चिका कपोतः सुखवर्चकः ।  
स्वर्जिश्च स्वर्जिका चैव सुवर्चिश्च सुवर्चकः ॥

अस्य निर्माणविधिः ।

केषुचिद् गिरिपृष्ठेषु भूतले वा तदन्तिके ।  
हृश्यते क्षारमृतपूर्णं भूस्तरं भूरिमानतः ॥  
स्वर्जिमृत् ॥ कथ्यते तच्च क्षारेतरपदार्थयुक् ।  
संगृह्य मृत्तिकां तां च मृतपात्रे स्थापयेत् ततः ॥  
चतुर्गुणजलेनैव मृत्तिकां तां विलोडयेत् ।  
तन्नीरं स्नावयेद् यत्ताद् बहुशः पृथुवाससा ॥  
पूर्वोक्तप्रकारेण काथयेत् तज्जलं ततः ।  
इत्थं संजायते क्षारः स्वर्जिकाह्वो मनोहरः ॥

(2) SWARJI KSHARA (REFINED NATRON).

In certain hills or in places adjacent to hills, layers of alkaline soil are to be found in abundance. This soil is called swarji-mrit (natron). It contains alkaline mud with foreign matters. Some quantity of this earth is to be dissolved with four times its weight of water. The solution is next to be

\* साज्जिमाटीति भाषा ।

distilled for several times through a piece of thick cloth. The solution, thus distilled, is next to be heated and condensed into solid alkaline substance, called swarji-kashara.

अस्य गुणः ।

स्वर्जिका वहिसंतुल्या यवक्षारसमा हि सा ।  
 कटूष्णतीकणवीर्या च कफानिलविनाशनी ॥  
 गुलमाध्मानोदरब्रणक्रिमिषु सा प्रशस्यते ।  
 शुक्रश्वासविबन्धाश्वेष्टुत्तुहित्तुनी ॥

*Its properties.*

Swarji, like java-kshara, has the properties of fire. It is pungent, warm, and acrid. It pacifies kapha, and vayu, and is efficacious in gulma, flatulence of the stomach, diseases of the belly, boils, worms, asthma, intestinal obstruction, enlargement of the spleen and the liver. It impairs semen.

कृत्रिमस्वर्जिक्षारः ।

कृद्दुरालभाक्षारो दुरालभाभवोऽपि वा ।  
 स्वर्ज्यभावे प्रदातव्यो भेषजेषु कवीश्वरैः ॥

*Artificial swarji-kshara.*

In the absense of swarji-kshara, as manufactured in the way stated above, physicians sometimes use,

as its substitute, a kshara prepared from the ashes of duralabha or small duralabha.\*

### (३) टंकनम् ।

मृत्तिका टंकलाह्या टंकनमिश्रिता या हि ।  
 प्राप्यते सा कदाचिद् वै शुष्कजलाशयोदरे ॥  
 समाहृत्य मृदं तत् तु जलेन सह मेलयेत् ।  
 सजलं टंकनं ततः काथयेत् तीव्रवह्निना ॥  
 यावद् विशुष्यति सर्वं ततः चारं समाहरेत् ।  
 सदाम + टंकनाह्यं सितप्रभं मनोहरम् ॥

### (3) TANKANA (BORAX).

A kind of mud containing borax is found in the beds of dried lakes (in upper India and Tibet). This mud is called 'tankal'. It is to be dissolved with water, filtered in the usual way, and dried up by heat, leaving crystals of borax deposited at the bottom of the pot.

टंकनस्य नामानि ।

टंकं च टंकनं चैव मालतीतीरसम्भवम् ।  
 रङ्गदं रसशोधनं पाचनकं रसाधिकम् ॥

\* The small variety grows in abundance in barren tracts of land, and especially in the Punjab where it is called "lana" (contraction of "lavana", meaning saltish).

+ दास्त्रा सह वर्तमानं सदाम । दामन् दाना इति भाषा ।

लोहद्रावी रसम् च सौभाग्यं वर्तुलं तथा ।  
 कनकद्वारनाम च मीलनं धातुवल्लभम् ॥  
 लोहश्लेषणकं चैव टंकनद्वार एव च ।  
 द्रावणकं रङ्गद्वारः सुभगं स्वर्णपाचकम् ।  
 लोहशुद्धिकरं चैव टंगनं च तदुच्यते ॥

टंकनस्य भेदः ।

टंकनं द्विविधं ज्ञेयं पिण्डाख्यं च सदामकम् ।  
 पिण्डाख्यं मलिनश्वेतं सदाम हि सितप्रभम् ॥

*Varieties of tankana.*

Tankana is of two kinds, viz. pinda (lump) tankana, and crystal tankana. The former is not pure white, whereas the latter is pure white.

टंकनस्य गुणाः ।  
 कटूषणरुक्वहिकृत् कफमो वायुपित्तकृत् ।  
 कासश्वासरजोरोधस्थावरविषजित् तथा ।  
 पिण्डाख्यं टंकनं ज्ञेयं हीनं तत् सितटंकनात् ॥  
 कटूषणस्त्रिघ्नीक्षणं हि सितं भेदि बलप्रदम् ।  
 पाचकं श्लेष्मवातम् च्यामविषदोषहृत् ॥  
 पिण्डाख्यात् तु सितं श्रेष्ठं शुद्धतरं हि तन्मतम् ॥

*Properties of tankana.*

Lump tankana is pungent, warm, rough, increaser of digestive power, destroyer of kapha, and increaser of vayu and pittam. It is efficacious in cough, asthma, dismenorrhoea, and inorganic poison. It is inferior to crystal tankana.

White or crystal tankana is pungent, warm, soft, acrid, white, laxative, strengthening, digestive, destroyer of kapha and vayu, and efficacious in waste, mucus, and poison.

The white borax is purer than the lump borax.

टंकनस्य शोधनम् ।

टंकनं वहियोगेन स्फुटितं हि विशुद्धति ॥

*Purification of tankana.*

Tankana is purified, if it is made to burst into white ashes by the application of heat.

क्षाराणां द्वैविध्यम् ।

क्षारास्तु द्विविधा ज्ञेया कठिनास्तरलास्तथा ।

कठिनाः प्रतिसार्याश्च प्रयोज्या भेषजादिषु ॥

तरलाः पानयोज्या हि गदेषु बहुषु मताः ।

काञ्जीसुरादधिकीरतक्रोषणवारिभिः सह ।

अथवा वारिणा साधौ कुलत्थसंभवेन हि ॥

भस्मवारिपरिस्तु तक्षारजलस्य पाकतः ॥

जायते तरलः क्षारो रक्ताच्छ्रुतीदणपिच्छ्रुतः ।  
तरलस्य पुनर्पाकात् क्षारोऽयं कठिनायते ॥

*Two kinds of ksharas—liquid and solid.*

Ksharas are of two kinds, viz. solid and liquid. Solid ksharas are meant for external application and for use as ingredients of medicines, whereas liquid ones are for drinking in several diseases with kanji, wine, curd, milk, butter milk, or decoction of kulattha.

Liquid kshara is obtained by heating distilled solution of ashes mixed with water up to the time when the solution grows red, clear, acrid, and sticky. Further heating of this liquid kshara results in the solidification of the solution into hard kshara.

प्रतिसार्यक्षारस्य विषयः ।

कुष्ठ-किटिमद्द्रुकिलासमगडल-भगन्दरार्वुददुष्ट-  
व्रणनाडी-चर्मकीलतिलकालकन्यच्छ-व्यङ्ग्यमशकबाख-  
विद्रधिकृमिविषार्शःसूपदिश्यते सप्तषु च मुखरोगेषु-  
पजिह्वाधिजिह्वोपकुशदन्तवैदर्भेषु रोहिणीषु चैवानु-  
श्वस्प्रणिधानमुक्तम् ।\*

*Diseases in which solid kshara is to be applied.*

Hard kshara may be applied in the following diseases :—leprosy in general, kitima (keloid), dadru

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\* विस्तरार्थं सुश्रुतस्य सूत्रस्थाने एकादशोध्यायस्तथा उत्तरतन्त्रे  
द्विचत्वारिंशोध्यायो द्रष्टव्यः ।

(ring-worm), kilasa (leucoderma), mandala (lepra), bhagandara (fistula in ano), arbuda (a kind of tumour), dusta-brana (unhealthy ulcers), nali-brana (sinus), charma-kila (condyloma), tila-kalaka (mobs), nyachha (chloasma), byanga (black spots on the face), mashaka (warts), bahya-bidradhi (external tumours), krimi (worms), bisha (poison), piles, upajihva (ranula), adhijihva (tumour on the tongue), upakusa (inflammation of the gum), danta-vaidarbha (inflammation of the gum from injury), and three sorts of rohini (diphteria).\*

तरलक्षारस्य विषया ।

पानीयस्तु गरगुलमोदरामिशूलाजीर्णरोचकानाह-  
शकराश्मर्यभ्यन्तर-विद्रधि-कृमि-विषार्शः-सूपयुज्यते ।  
अहितं तु रक्तपित्तज्वरितपित्तप्रकृतिबालवृद्धदुर्बल-  
भ्रममदमूर्च्छातिमिरपरीतेभ्यऽन्येभ्यश्चैवंविधेभ्यः ।

*Use of liquid Kshara.*

The liquid kshara is used in toxin, gulma, udara, indigestion, colic, loss of appetite, intestinal obstruction, diabetes, stone disease, internal tumour, worms, and piles.

It is injurious in hemorrhage, fever, biliousness, diseases of children, old men, and weak men,

\* Allopathic classification of diseases is so vague and general that it is impossible to find a corresponding allopathic name for every name of diseases mentioned in the Hindu science of medicine.

giddiness, after-effects of drinking wine, loss of eye-sight, etc.

सर्वक्षारस्य निर्माणविधिः ।

सर्वद्वारं चिकीषुः शरदि गिरिसानुजं शुचिः  
प्रशस्तेऽहनि प्रशस्तदैशजातमनुपहतं मध्यमवयसं  
महान् तमसितमोक्तकं पाटयिष्यति । खण्डशः  
प्रकल्प्यावपाद्य निर्वाते देशे निचितं कृत्वा सुधा-  
शर्कराश्च प्रक्षिप्य तिलनालैरादीपयेदथोपशान्तेऽग्नौ  
तद्भस्म पृथग् यहीयाद् भस्मशर्कराश्च । अथानेनैव  
विधानेन कूटजपलाशाश्वकर्णपारिभद्रकविभीतकार-  
ग्वधतिलवकार्कस्नूह्यपामार्गपाटलानक्तमाल वृषकदली  
चित्रकपूतीकेन्द्रवृक्षास्फोताश्वमारकसपच्छदाभिमन्थ-  
गुञ्जाश्वतस्तश्च कोषातकीः समूलफलपत्रशाखा  
दहेत् । ततः क्षारद्रोणमुदकद्रोणैः षड्भिरालेड्य  
मूत्रैर्वा यथोक्तरैकविंशतिवारान् विस्त्राव्य महति  
कटाहे शनैर्द्रव्या विघट्यन् विपचेत् । स यदा  
भवत्यच्छो रक्तस्तीक्ष्णः पिच्छलश्च तमादाय महति  
वस्त्रे परिस्थाव्येतरं विसृज्य च पुनरभावधिश्रयेत् ।  
तत एव च क्षारोदकात् कुड्वमध्यद्धं वापनयेत् ।  
ततः कटशर्कराभस्मशर्कराक्षोरपाकशङ्खनाभीरभि-  
वर्णाः कृत्वायसे पात्रे तस्मिन्नेव क्षारोदके निषिद्ध्य

पिष्टा तेनैव द्विदोणे इष्टपलसंमितं शङ्खनाभ्यादीनां प्रभाणं प्रतिवाप्य सततमप्रमत्तश्चैनमवघट्यन् विपचेत् । स यथा नातिसान्द्रो नातिद्रवश्च भवति तथा प्रयतेत् । अथैनमागतपाकमवतार्यानुस्तस-मायसे कुम्भे संबृतमुखे निदध्यादेष मध्यमः । एष एवाप्रतीवापः पक्षः संब्यूहिमो मृदुः । प्रतीवापे यथालाभं दन्ती द्रवन्ती चित्रकलाङ्गलकीपूतिक-प्रवालतालपत्रीविड्सुवर्चिकाकनकक्षीरीहङ्कृवचाविषाः समाः शुद्धणचूर्णाः शुक्तिप्रभाणाः प्रतिवापः । स एव सप्रतीवापः पक्षः पाक्यस्तीक्षणस्तेषां यथा-व्याधिबलमुपयोगः । क्षीणबले तु क्षारोदकमावपेदु बलकरणार्थम् ।

एष सर्वक्षारः सुश्रुतोक्तविधानेन प्रतिसारणार्थं नियोक्तव्यो न तु विषयान्तरे ।

*Process of preparing svarva-kshara.*

A middle-aged black mokshaka tree growing in a valley of a mountain is to be cut into pieces, sometime in the two months following the rains, and kept in a heap in a place protected from drafts of air. Some lime stone (or balls of lime-mud dried up, generally known by the name of "ghuting") is also to be kept inside the heap of wood, which is

to be burnt by fire made of sesamus plant. The ashes of the wood are then to be separated from the burnt lime-stone, as well as from the burnt soil upon which the act of burning takes place.

In the same way, ashes will have to be prepared from the following trees (or plants, as the case may be) :—kutaja, palasha, asva-karna (a kind of shala), paribhadra, bibhitaki, aragbadha, lodhra, arka, snuhi, apamarga, patali, bisha-karanja, basaka, kadali, chitraka, putika (rama-karpura), kutaja, asphota (bhadra-ballı),\* karabira, saptaparni, agni-mantha, gunja, and four kinds of ghosha (including deva-dali).

Two thirds of a drona of the ghanta-patali kshara and one third of a drona of the kshara prepared from kutaja and the other trees, referred to above, are to be dissolved with water or cow's urine, six dronas in weight, and filtered for 21 times. The solution is next to be subjected to heat till it becomes clear, red, acrid, and sticky, when it will have to be filtered again, rejecting the dregs. The solution, thus filtered, may be used as a liquid kshara, if necessary.

Take one kuraba or  $1\frac{1}{2}$  kuraba of this solution, and rub it with 8 palas of all these combined :—burnt lime, burnt sand obtained from the spot where the wood was burnt, oyster shells burnt, and nabhisankha (a kind of conch shell)—each equal in quantity, and previously made red-hot by heating in an iron

\* Bengali, "hapharmali". Asphota may also mean red arka.

cauldron. The paste, thus prepared, is to be boiled with two dronas of the liquid kshara, referred to above, turning it, all the while, by an iron ladle in such a way as to make the product neither solid nor liquid. The kshara, thus prepared, is of moderate strength. It would be mild, if prepared in the above way without the mixture of the paste, referred to above. It can be rendered the strongest, if prepared with the addition of four tolas in weight of the fine powder of each of the following, mixed in course of the heating :—danti, dravanti, chirtraka, langalaki, leaves of nata-karanja, tala-muli, bira-salt, swarji-kshara, swarna-kshiri, hingu, bacha, and ati-visha.

These ksharas are to be kept in jars with their mouths covered.\*

क्षारद्रव्यम् ।

स्वर्जिका यावशूकश्च क्षारद्रव्यमुदाहृतम् ।

क्षाराष्ट्रकम् ।

पलाशवज्जिशिखरिचित्राकंतिलनालजाः ।

यवजः स्वर्जिका चेति क्षाराष्ट्रकमुदाहृतम् ॥

क्षारा एतेऽग्निना तुल्या गुलमशूलहरा भृशम् ॥

*The two ksharas.*

Swarjika and java-kshara combined are called the two ksharas.

\* For details see, Chapter XI, Sutra-sthanam, and XXXXII, uttaratantra, Sushruta.

*The eight ksharas.*

The following eight are called the eight ksharas :—ksharas prepared from (1) palasha, (2) snuhi, (3) apamarga, (4) chincha, (5) arka, (6) tila plant, (7) ears of barley and (8) swarji kshara.

These are like fire and are curer of gulma and colic.

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## षष्ठोऽध्यायः ।

अथ लवणानि ।

लवणं पट् लोतं च लोनं शिवं च कथ्यते ।  
 लवणानि पडूच्यन्ते सामुद्रं सैन्धवं विडम् ।  
 सौवर्चलं रोमकं च चुलिकालवणं तथा ॥

### CHAPTER VI.

*Lavanas (salts).*

There are six different kinds of salts, viz. (1) samudra (marine), (2) saindhava (rock-salt found in the Punjab and sind), (3) bira (an artificial salt), (4) sauvarchala (salt-petre), (5) romaka (salt obtained from the lake, sambar, in Rajputana), and (6) chulika (nava-sara or sal-ammoniac).

सामान्येन लवणानां गुणाः ।  
 लवणः शोधनो रुच्यः पाचनः कफपित्तदः ।  
 पुंस्त्ववातहरः कायशैथिल्यमृदुताकरः ॥  
 बलभ्र आस्यजलदः कपोलगलदाहकृत् ॥

*Properties of salts in general.*

Salt is purifier, increaser of relish in food, digestive, increaser of kapha and pitta, destroyer of manliness and of vayu. It slackens and softens the body, impairs strength, induces shedding of water through the mouth, and causes inflammation in the cheek and the neck.

अतियुक्तस्य लवणस्य गुणः ।

सोऽतियुक्तोऽच्चिपाकास्थपित्तकोठक्षतादिकृत् ।  
बलीपलितखालित्यकुष्ठविसर्पतृट्प्रदः ॥

*Properties of salt taken in excess.*

Salt, taken in excess, causes ophthalmia, racta-pitta, intestinal ulcer, falling off of teeth, greyness of hair, baldness, leprosy, erysipelaus, and thirst.

( १ ) सामुद्रलवणम् ।

सामुद्रमच्चिवं चैव वशिरं च समुद्रजम् ।  
सामुद्रं दीपनं तीक्ष्णं लघु रुच्यं च सारकम् ।  
क्षारगुणयुतं कफपित्तकृद् वायुनाशनम् ॥

## (1) SAMUDRA LAVANA (SEA.SALT).

It is digestive, acrid, light, increaser of appetite, laxative, having some of the properties of alkalis, increaser of kapha and pitta, and pacifier of vayu.

( २ ) सैन्धवम् ।

सैन्धवं शीतशिवं ॥ च मणिमन्थं च सिन्धुजम् ।  
 सिन्धुदेशे तथा पञ्चनदाख्ये प्राप्यते खनौ ।  
 तदेव दीपनं शीतं लवणमधुरं लघु ॥  
 मृदगिर्धनं रुच्यं चक्षुष्यं शुक्रदं तथा ।  
 त्रिदोषम् तथा सूक्ष्मं विवन्धवणनाशनम् ॥

(2) SAINDHAVA (ROCK-SALT).

Saindhava is a rock-salt found in the sind and the Punjab. It is digestive, producing a cooling effect in the system, saltish-sweet in taste, light, soft, increaser of power of digestion and liking for food, beneficial to eye-sight, increaser of semen, pacifier of the three doshas, capable of entering everywhere into the system, and destroyer of constipation and boils.

( ३ ) विडम् ।

विडं च विडगन्धं च काललवणकं तथा ।  
 खण्डं द्राविडकं चैव विडलवणमासुरम् ॥  
 खण्डलवणकं धूतं कृतकं क्षारमेव च ।  
 कृत्रिमकं सुपाक्यं च वैद्यकलवणं तथा ॥

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\* शीतशिवमिति शीतं शीतवीर्यं शिवं लवणमिति । सर्वेषां  
 लवणानां मध्ये केवलं सैन्धवं शीतवीर्यम् ।

अस्त शुणाः ।

विङ्गं लवणमुष्टिं च तीक्ष्णं क्वारयुतं लघु ।  
 दीपनं पाचनं रुद्धं रुच्यं वमथुवेगदम् ॥  
 कफवातानुलोमनं पित्तकृदं रेचनं तथा ।  
 शूलाजीर्णविवन्धेषु विष्टम्भानाहगुलमषु ।  
 हृदगौरवे तथा मेहे विङ्गं शुभफलप्रदम् ॥

(3) BIRA (AN ARTIFICIAL SALT).

Bira is saline in taste, warm in its effect on the system, acrid, alkaline, light, digestive, coarse, increaser of appetite, causing nausea, pacifier of kapha and vayu, increaser of pittam, and laxative. It is efficacious in colic, indigestion, constipation, flatulence, intestinal obstruction, abdominal tumour, heaviness of the heart, and spermatorrhoea.

विङ्गलवगस्य निर्माणम् ।

प्रथमोविधिः ।

द्वयधिकाशीतिभागाश्च सामुद्रलवणस्य वै ।  
 पथ्यामलकस्तर्जीनां ग्राह्योभागो पृथक् पृथक् ॥  
 द्रावितं सर्वमेकत्रं हृष्टा वह्निमपानयेत् ।  
 स्वतःशीतं समुद्धार्य रक्षयेद् यत्ततो विङ्गम् ॥

*Preparation of bira salt (black salt),*

**First process.**

Eighty two parts of sea-salt and one part each of haritaki, amalaki, and sarji (refined natron)—all powdered well, are to be heated strongly in an earthen vessel, till they are fused together into one lump.

द्वितीयोविधिः ।

सामुद्रमष्टभागं च धात्रीचूर्णस्य भागकम् ।  
उभयं मेलयेत् सम्यग् मृतपात्रे स्थापयेत् ततः ॥  
द्रावयेत् तीव्रवह्निं ततो वह्निमपानयेत् ।  
खतःशीतं समुद्धृत्य विडं योगेषु योजयेत् ॥

**Second process.**

Eight parts of sea-salt and one part of powdered amalaki are to be mixed together, kept in an earthen vessel, and then subjected to a strong heat till the two materials are fused together. The product, when cooled of itself, is called bira salt or black salt.

(१) सौवर्चलम् ।

अन्दं सौवर्चलं पाक्यमूषरं रुचकं तथा ।  
द्वारश्च लवणं चैव सौवर्चलं तदौऽन्तिमम् ॥१

\* पश्च हि उषरात्मः क्षारः । २६६ पृष्ठं द्रष्टव्यम् ।

## (4) SAUVARCHALA (SALT-PETRE).

It is the same as ushara kshara or salt-petre. It is both an alkali and a salt. For the preparation of salt-petre, see page 268.

कृत्रिमसौवर्चलस्य निर्माणविधिः ।

स्वर्जिक्षारश्च तत् तुल्यं सैन्धवं मेलयेद् द्रव्यम् ।  
 सूक्ष्मचूर्णीकृतं सर्वं निदध्याद् मृदघटे ततः ॥  
 तदा विनिःक्षिपेत् तत्र चूर्णाधिकं जलं शुभम् ।  
 पचेत् सर्वं ततो धीरो यत्तो चरणवहिना ॥  
 यावच् चूर्णं द्रृतिं याति जलमपि विशोष्यते ।  
 शोषितेऽपि नीरे सम्यक् किञ्चित्कालं विपाच्यते ।  
 स्वतः शोतं समुद्धाय॑ सौवर्चलमतः परम् ॥  
 पटुसौवर्चलं तद्विक्षारसौवर्चलं न तु ।

*Preparation of artificial sauvarchala.*

An equal quantity of powdered swarji (natron) and saindhava (rock-salt) are to be mixed together and dissolved with water in an earthen vessel which is to be heated strongly till the solution melts well and then dried up. The heat is to be continued for some time after the drying up of the product.

The product may be used as sauvarchala salt, and not as sauvarchala kshara.

(N.B.—The salt, thus prepared, may be used in lieu of salt-petre, where the emphasis is laid on the word ‘salt’, but where there is a stress on the word “kshara”, only salt-petre, and not its substitute, should be used.)

( ५ ) रोमकम् ।\*

अस्य नामानि ।

रोमकं रोमलोणं च साम्वरं सम्वरोद्भवम् ।  
शकम्भरीहृदोद्भवं गडाख्यं लवणं हि तत् ॥

अस्योत्पत्तिस्थलम् ।

जयपुराभिधे राज्ये रोमोऽस्ति लोतनीरथुक् ।  
नाम्ना शाकम्भरी सोऽयं साम्प्रतं सम्वराभिधः ॥  
लवणाक्तं जलं तस्य सागरनीरसंनिभम् ।  
तज्जलाज् जायते लोतं + रोमकाख्यं तदेव हि ॥  
रोमावती नदी तस्माद् रोमात् पुरा प्रवाहिता ।  
लवणं तज्जलोत्थं च संज्ञितं रोमकं पुरा ॥  
आसीत् पुरा पुरी तत्र रोमाख्या हि यशस्वती ।  
साम्प्रतं वर्तते तत्र जयपुराभिधा पुरी ।  
सम्वरादम्बराख्यां हि लेभे तत्र पुरान्तरम् ॥

\* रोमः गर्तं जलाशयइत्यर्थः तस्मात् जायते इति रोमकम् ।

+ लोतमिति लवणम् ।

## (5) ROMAKA (SAMBAR-SALT.)

In the province of Jayapura (in Rajputana), there is a salt-water lake, named Shakambhara, now called Sambar. Its water is as saline as sea-water. The salt, produced from the water of this lake, is called "romaka". In ancient times, a river named "Romavati" (now extinct) flowed from this lake. The salt which was produced from the water of this river was also called 'romaka' salt. In the vicinity of this lake, there was, in ancient times, a famous town, called 'Roma'. It was perhaps located somewhere near the modern town of Jaypore (built by king Jaysinha). There is another town in the neighbourhood, named Ambar, which is a corrupted form of Sambar (the modern name of the lake).

अस्य गुणाः ।

रोमकं कटुतिक्तं च तीक्ष्णोष्णं लावणं लघु ।

दीपकं भेदकं चैव पित्तदाहक्यप्रदम् ।

अभिष्यन्दि तथा सूक्ष्ममशोनुहृ वायुनाशनम् ॥

*Its properties.*

Romaka or sambara salt is bitter, pungent, and saline. It is acrid, warm, light, digestive, and laxative. It gives rise to pittam, inflammation, and waste. It helps the emission of phlegm (through nostrils and eyes). It is capable of passing even through the finest and minutest passages of the system, and is a pacifier of vayu.

(६) चुलिकालवणम् ॥\*

पाकिमो नवसारश्च चुलिकालवणं तथा ।  
क्षारोऽयं लवणं चोपरसश्च कथ्यते बुधैः ॥

(6) CHULIKA SALT.

It is the same as nava-sara (or sal-ammoniac).†

\* द्वितीयखण्डे २१४ पृष्ठं तथा तृतीयखण्डे २६० पृष्ठं द्रष्टव्यम् ।

† See page 215, Vol. II, and page 262 Vol. III.

## सप्तमोऽध्यायः ।

अथ विषाणि ।

विषं तु गरलः क्षेद्वस्तस्य भेदानुदाहरे ।  
स्थावरं जंगमं चैव गरं च त्रिविधं विषम् ॥  
दशाधिष्ठानमायं तु द्वितीयं षोडशाश्रयम् ।  
गरस्तु कृत्रिमं विषं विरुद्धभोजनादिजम् ॥

## CHAPTER VII.

### *Poisons.*

Poisons are of three kinds, viz. inorganic, organic, and artificial. The first is of ten different kinds, and the second of sixteen. The third is toxin arising mainly out of the eating together of different kinds of food-stuff which are not compatible with one another (e.g. milk and fish or meat; milk and sour things, etc.).

अथ स्थावरविषम् ।

मूलं पत्रं फलं पुष्पं त्वक् क्षीरं सार एव च ।  
निर्यासो धातवश्वैव कन्दश्च स्थावराश्रयाः ॥

कन्दाख्यं तेषु हि श्रेष्ठमष्टादशविधं हि तत् ।  
 सकृतुकं मुस्तकं शृङ्गी वालुकं सर्षपाहृयम् ॥  
 वत्सनाभं च कूर्मश्च श्वेतशृङ्गी तथाष्टमम् ।  
 इत्यष्टौ योजयेद् योगे कालकूटादि वर्जयेत् ॥  
 कालकूटं मेषशृङ्गी हलाहलं च दार्दूरम् ।  
 कर्कटं मर्कटं ग्रन्थि हारिद्रं रक्तशृङ्गकम् ।  
 केशरं दशमं चैति वर्जनीयं भिषग्वरैः ॥

### INORGANIC POISON.

Inorganic poisons are of ten different forms, viz. (1) roots, (2) leaves, (3) fruits, (4) flowers, (5) barks, (6) milk of plants or tree, (7) wood (8) exudations, (9) metals, and (10) tubers.

Of these, poisons in the form of tubers are the best. Such poisons are of eighteen different kinds, viz. (1) saktuka, (2) mustaka, (3) shringi, (4) baluka, (5) sarshapa, (6) batsa-nabha, (7) kurma, (8) sweta-shringi, (9) kalakuta, (10) mesha-shringi, (11) halahala, (12) dardura, (13) karkata, (14) markata, (15) granthi, (16) haridra, (17) racta-shringa, and (18) keshara.

Of these eighteen, the first eight are to be used according to directions, whereas the last ten (viz. from kalakuta to keshara) are to be avoided altogether.

कन्दविषाणां परिचयः ।

(१) सक्तुकः ।

यद्यप्रन्थिः सक्तुकेनेव पूर्णमध्यः स सक्तुकः ।  
पुण्डरीकं स एव हि मध्यश्वेतं च दृश्यते ॥  
चित्रमुत्पलकन्दाभं सुपिष्टं शक्तुवद्भवेत् । ◎  
सक्तुकं तद्विजानीयाद्व दीर्घवेगं महोल्वणम् ॥

*Descriptions of tuber poisons.*

(1) *Saktuka.*

Saktuka or pundarika is that kind of poisonous tuber, the interior of which appears to be made of saktu (dried and powdered barley), and is of white colour. The tuber itself is as attractive as that of a lily. It gives the appearance of saktu (dried and powdered barley) when pestled well. The poison acts very swiftly and is very strong.

(2) मुस्तकम् ।

हस्तवेगं च रोगमन्नं मुस्तकं मुस्तकाकृति ।

(2) *Mustaka.*

Mustaka poison is slow in action. It cures diseases and has the appearance of mustaka (*cyperus rotundas*).

\* चित्रमिति मनोहरम् ।

(३) शङ्की ।

यस्मिन् गोशृङ्खके बछ्दे दुग्धं भवति लोहितम् ।  
तं शृङ्खीति विजानीयाद् वर्णेन कृष्णपिङ्गलम् ॥

(3) *Shringi.*

This poisonous tuber, if tied up with the horns of a cow, makes it yield milk of blood-red colour. This tuber is of a blackish-tawny colour.

(४) वालुकम् (सैकतम्) ।

वालुकं वालुकोपमं ज्वरादिसर्वरोगहृत् ।  
सिकताभिरिवापूर्णो ग्रन्थिरस्य बुधैर्मतः ॥

(4) *Baluka (saikata).*

Baluka tuber appears to have its inner part filled with sand, as it were. It cures fever and other diseases.

(५) सर्षपम् ।

पीतवण्ठं ज्वरम् च सर्षपं विषमुच्यते ।  
कन्दरोम्णि विषं तद्धि सर्षपाभकणाचितम् ।  
स्थूलसूदमैः कण्ठ्युकं श्वेतपीतैर्विलोभकम् ॥

(5) *Sarshapa.*

Sarshapa tuber is yellow in colour, and is a curer of fever. It has got hair-like shoots which only are poisonous. The holes or pores where these hair-like shoots grow, are full of particles having

the appearance of mustard seeds. Some of these particles are big, and the rest are small. Some of them are white, whereas the others are yellow. The tuber itself is, therefore, very attractive to look at.

(६) वत्सनाभः ।

(क)

वत्सनाभिनिभः कन्दो न दीर्घः पञ्चकाङ्गुलात् ।

स्थूलतरो न गोस्तनाद् द्विविधो वत्सनाभकः ॥

आशुकारी लघु स्त्यागी\* शुद्धः कृष्णोऽन्यथा भवेत् ।

प्रयोज्यो रोगहरणे वत्सनाभिद्वयं मतम् ॥

(ख)

निर्गुण्डीपत्रवर्णयुग् वत्सनाभ्याकृतिस्तथा ।

यत्पार्श्वे न तरोर्बृद्धि वर्त्सनाभः स पाण्डुरः ॥

(6) *Batsa-nabha (aconite).*

The tuber, named batsa-nabha, has the appearance of a cow's udder. It is not more than five angulis in length; neither is it thicker than cow's udder. It is of two varieties, viz. white and black. The first variety is swift in its action, light, and laxative. The black variety possesses opposite properties. Both the varieties are used in medicines as well as in rasayana.

(ब)

Batsa-nabha (or aconite) has the colour of nirgundi leaves. It resembles the navel of a calf.

\* स्त्यागीति मलादेरेचकः ।

Trees and plants growing around it do not thrive at all. It is pale-white in colour.

बत्सनाभस्य गुणाः ।

नैपालशृङ्खौ नैपाली चामृतं विषनामकम् ।  
 बत्सनाभं कटु स्वेद्यं तिक्तं मूत्रलमेव च ॥  
 आग्नेयं वेदनाप्तं च सादनं शूलनाशनम् ।  
 अभिधातरुजं हन्ति वीसर्पं कफजान् गदान् ॥  
 वातजान् निखिलांश्चापि सन्निपातोद्भवं ज्वरम् ।  
 आमवातं महाघोरं हृदरोगमपि दारुणम् ॥

*Properties of Aconite.*

Aconite is bitter and pungent. It causes perspiration and discharge of urine. It is digestive, remover of pain, causing depression, and curer of colic and pain due to percussion. It is efficacious in erysipelas, diseases due to an excess of kapha and vayu, fever due to an excess of the three doshas, rheumatism, and heart disease.

(६) कूर्मः ।

कूर्मवद् दृश्यते यत्तु तत् कूर्म इति भाषितम् ।

(7) *Kurma.*

The tuber poison, which resembles a tortoise in appearance, is called kurma.

## (८) श्वेतशृङ्खलम् ।

श्वेतशृङ्गं विजानीयात् प्रायशः श्वेतशृङ्खवत् ।  
 शृङ्खिकमिव तद्दुग्धं रक्षयति गवां खलु ।  
 फणाकारं कथञ्चित् तदतो दर्विकमुच्यते ॥

(8) *Sweta shringa.*

*Sweta-shringa* or *darvika* is like a white horn or snake's hood in appearance. Like *shringi*, it makes a cow yield milk of blood-red colour, if it is tied up with its horns.

## (९) कालकूटः ।

अस्ति विषतरुः कर्श्चिदश्वत्थसंनिभः खलु ।  
 निर्यासः कालकूटोऽस्य मुनिभिः परिकीर्तिः ॥  
 काकचञ्चुनिभो वर्णाकृतिभ्यां ज्ञायते हि सः ।  
 वृत्तः कन्दो भवेदस्य जम्बीरसन्निभासितः ॥  
 कालकूटं विजानीयाद् ग्रातमात्रं मृतिप्रदम् ।  
 स हि चेत्रे शृङ्खवे कंकने मलये भवेत् ॥

(9) *Kala-kuta.*

There is a poisonous tree of the appearance of an *aswattha*. Exudation of this tree is called *kala-kuta*. This resembles a crow's eye in appearance and in colour.

The tuber of this tree is globular and black, like a lime fruit. This tuber is so strongly poisonous that even its odour is sufficient to take

away the life of a human being. This tree grows in the provinces, named "shringabera," "Konkan" and the "malaya" hills in the Deccan.

(१०) मेषशृङ्गी |\*

आविकशृङ्गतुलयो यो मेषशृङ्गी स कथ्यते ।  
शृङ्गिकमिव तद् दुर्घं रञ्जयति गवां खलु ॥

(10) *Mesha-shringi.*

It resembles a ram's horn in appearance. It also makes a cow yield milk of blood-red colour, if it is tied up with its horns.

(११) हलाहलः ।

गोस्तनाभफलो गुच्छस्तालपत्रच्छदस्तथा ।  
तेजसा यस्य दद्यन्ते समीपस्था द्रुमादयः ॥  
असौ हलाहलस्तरुः किञ्चिन्द्यायां हिमालये ।  
दक्षिणाब्धितटे देशे कंकने च प्रजायते ॥  
भंगुराकन्दवत् कन्दः तरोस्तस्यापि कथ्यते ।  
अन्तर्नीलो बहिः श्वेतः कन्दोऽसौ हि हलाहलम् ॥

(11) *Halahala.*

The tree named 'halahala' has fruits like cow's udder. The bunch of its fruits has the appearance of an umbrella made of palm leaves. No tree, plant,

\* मेषशृङ्गास्य विषदोषहीनं द्रव्यान्तरं वर्तते ।

etc. grows in the vicinity of this poison tree. It grows generally in kiskindhya, the Himalayas, the south-sea coast, and kankana. Its tuber has the appearance of the tuber of atibisha. The halahala tuber is blue inside and white in the outside.

## (१२) दार्दुरम् ।

ददूराख्ये गिरौ यत्तु जायते मलयान्तिके ।  
 दार्दुरं कथ्यते तच्चि ब्रह्मपुत्रश्च कर्दमम् ॥  
 वर्णेन कपिलं तच्च कर्दमसंनिभं तथा ।  
 ददूरे मलये चापि जायते तदुविषोल्वणम् ॥

(12) *Dardura*.

It grows in the hill named 'Dardura' situated near the Malaya mountain. It is also called brahma-putra and kardama. It is tawny in colour and is like mud in appearance. It is strongly poisonous and grows in the Dardura and the Malaya hills.

## (१३) कर्कटं कर्कोटं वा ।

कर्कोटं कपिवर्णं स्यात् कर्कोटकसमप्रभम् ।†  
 तदेव विषमं विषं रेखाभ्यन्तरतो मृदु ॥

\* मलयाचलसञ्जिदी ददूरनामा गिरिरस्ति । तथा हि—  
 स्तनविव दिशस्तस्याः शैलौ मलयददूरौ [ रघुवंशम् ४।५१ ] ।

† कर्कोटक इत्यस्य स्थले कर्कटक इत्यस्य सम्भावितणाठस्य  
 साधुतरतापि सुधीसिर्विचार्या ।

(13) *Karkata or Karkota.*

It has the colour of a monkey. It resembles a karkota fruit (or karkata—a crab). It is soft only underneath the stripes found upon its surface. (Elsewhere it is hard).

(१४) मूलकम् ।

श्वदंष्ट्ररूपसंस्थं च शुक्रकन्दं हि मूलकम् ।

तदेव मूलकोपमं मर्कटनामकं च तत् ॥

कचित् कचिद् विषं तद्धि यमदंष्ट्रेति कथ्यते ।

सुराष्ट्रे जायते तस्मात् सौराष्ट्रिकं तदुच्यते ॥

(14) *Mulaka.*

Mulaka is a white tuber. It has the appearance of dog's teeth and also of mulaka (raddish). It is also called markata, jama-danstra, and saurastrika. The last-mentioned name has been given to it, on account of its growing in the province of surat.

(१५) ग्रन्थिः ।

हरिद्राग्रन्थिवद् ग्रन्थिः स स्यात् कृष्णोऽतिभीषणः ।

(15) *Granthi.*

The tuber of granthi plant has knots like those found in tubers of turmeric. It is black in colour, and is terribly poisonous.

(१६) हारिद्रः ।

हरिद्रातुल्यमूलो यो हारिद्रः स उदाहृतः ।  
 विराटे जायते तस्माद् वैराटकं च कथ्यते ॥  
 मूलाग्रयोः सुवृत्तः स्यादायतः पीतगर्भकः ।  
 कञ्चुकाढ्यः स्थिग्धपर्वा हारिद्रः शक्तुकन्दकः ॥

(16) *Haridra or vairata.*

The tuber of this plant is like that of turmeric. It is also called "vairata", simply because it grows mainly in the province of Virata. Both the extremities of this tuber are well-rounded. It is broad-shaped, and is yellow inside. It has a fine skin or covering. Each of the parts of this tuber between one knot and the nearest is smooth or appearing to be smeared with oil. This tuber (like saktuka) resembles, when pestled and made into a paste, shaktu or fried and powdered barley.

(१७) रक्षशङ्की ।

गोशृङ्खायेऽथ विक्षिप्तो नासयास्तक् प्रवर्त्तते ।  
 लघुगोस्तनवत्कन्दो रक्षशृङ्खीति तद्विषम् ॥

(17) *Racta-shringi.*

This tuber, if thrown upon the horns of a cow, causes the shed of blood through its nostrils. This tuber is light in weight and has the appearance of cow's udder.

(१८) प्रदीपनः ।

शुष्काद्र्द्वं इव किंजलकमध्ये तत् केशरं विदुः ।  
वर्णतो लोहितः स स्याद् दीसिमान् दहनप्रभः ॥  
महादाहकरः पूर्वैः कथितः स प्रदीपनः ।  
महाविषाहृयश्चासौ केशरञ्चापि कथ्यते ॥

(18) *Keshara, Pradipana or Mahabisha.*

It has the appearance of a dried ginger tuber, kept in the midst of filaments or blossoms of a flower. It is red and resembles fire in colour. It causes a terrible inflammation on that part of the body which comes in contact with this poison.

विषाणां व्यवहारः ।

धातुवादे विषार्थे च क्षेमकार्ये ॥ क्वचित् क्वचित् ।  
युज्यते कालकूटादि न भैषज्ये रसायने ॥  
सकुकादिं प्रयुक्तीत सर्वरोगे रसायने ।  
विप्रादिजातिभेदेन यथाविधि सुशोधितम् ॥

\* क्षेमकार्यमिति रसादिना नागघङ्गादीनां स्वर्णं वा रौप्ये  
रूपान्तरीकरणम् । एतदेव वेधनकार्यमपि कथ्यते । तथाहि राम-  
राजीयग्रन्थस्यानुक्रमणिकार्यां—

रसविद्या त्रिधा प्रोक्ता धातुवादक्षिकित्सितम् ।  
दुर्लभा क्षेमविद्या च सर्वविद्यासु ता वराः ॥  
चिकित्सा हितयी हेया व्याधीनां जरस्तथा ।  
जराव्याधिविनाशिनी चिकित्सा हि रसायनम् ॥

*Use of tuber-poisons.*

The ten kinds of poisons beginning with kala-kuta may be used sometimes for the purposes of metallurgy, preparation of poison, and kshema operations or alchemy \*; but they should never be used in medicines of any kind.

Only the eight tuber-poisons beginning with saktuka should be used, well-purified and as prescribed in the medical treatises. In using these eight in medicines, care should be taken to see that their use is decided upon with reference to the caste or class of poisons to which a particular member of this group belongs (see below).

विषाष्टकस्य जातिमेदः ।

( १ )

श्वेतो रक्तश्च पीतश्च कृष्णश्चेति चतुर्विधः ।

ब्राह्मणः क्षत्रियो वैश्यः क्रमाज् ज्येष्ठश्च शूद्रकः ॥

श्वेता वा यदि वा पिङ्गा मधुरा वोषराऽपि वा ।

लोमशा ब्रह्मजातिः स्यात् क्षत्रजातिस्तु लोहिता ॥

पीता वा मधुरा किञ्चित् वैश्यजातिस्तु धूसरा ।

कृष्णा शूद्रजातिर्ज्ञेया विषाणां च भिषग्वरैः ॥

\* The science of kshema or khema deals with transformation of base metals into gold. The term khema has been contracted into the Persian "kimia" or al-chemia. Vide page 100 of the author's work, "Indian civilization and its Antiquity."

( २ )

क्षीरं संपूर्य भाग्नेऽपि विषं दत्त्वा विलक्षयेत् ।  
यद्वरणं जायते क्षीरं तेन जातिं विनिर्दिशेत् ॥  
शुक्रं रक्तं तथा पीतं कृष्णं चेति चतुर्विधम् ।  
वर्णानि ब्राह्मणादीनां ज्ञायन्ते भिषजां वरैः ॥  
क्षिप्तं दुग्धे विषं वैद्यो जानीयात् क्रमशो यदि ।  
श्वेतं रक्तं तथा पीतं कृष्णं चोष्णं तदेव च ॥  
ब्राह्मणः क्षत्रियो वैश्यः शूद्रश्च हि यथाक्रमम् ॥

*Caste or classification of the eight poisons referred to above.*

( १ )

Brahmana, kshatriya, vaisya, and shudra are generally of the following colours, respectively:—  
(1) white, (2) red, (3) yellow, and (4) black.

A poison is of the Brahmana or wise caste, if it is white or tawny, is sweet or saltish in taste, and has got hair-like shoots over its body. The kshatriya (or warrior class) of the poisons is red in colour. The vaisya (merchant class) is yellow or grey and somewhat sweet in taste. The shudra (or the agricultural and serving class) is black in colour.

( २ )

The caste of a poison may also be ascertained by throwing it into milk. If the milk into which the

poison has been immersed assumes a white colour, the poison is of the Brahmana caste ; if the milk turns red in colour, the poison is of the kshatriya caste ; if the milk is of yellow colour, the poison is of the vaisya caste ; and if the milk is of black colour, the poison is of the shudra caste. The milk also grows warm at the touch of the poison.

ब्राह्मणादिविषाणां गुणाः ।

**रसायनवरो विप्रः क्षत्रियो रसकर्मकृत् ।**

**वैश्यः कुष्ठविनाशनः शूद्रस्तु मृतिदायकः ॥**

**ब्राह्मणो दीयते रोगे क्षत्रियो विषभक्षणे ।**

**वैश्यस्तु कुद्ररोगेषु सर्पदृष्टाय शूद्रकः ॥**

*Properties of poisons, according to caste.*

The Brahmana (white-coloured) poison is a curer and preventer of diseases and senile decay. The kshatriya (red-coloured) is used in mercurial operations. The vaisya (yellow-coloured) is a curer of leprosy, and the shudra (black-coloured) is giver of death.

The Brahmana variety of poisons is to be used in diseases ; the kshatriya variety to be given to a patient who has swallowed some poison ; the vaisya variety is to be used in diseases of minor importance, and the shudra variety to be given to a man who has been bitten by a poisonous snake.

सामान्येन विषाणामवगुणाः ।

सर्वाणि कुशलैर्ज्ञेयान्येतानि दशभिर्गुणैः ।

रुद्रमुष्णं तथा तीक्ष्णं सूक्ष्ममाशु व्यवायि च ॥

विकाशि + विसरं चैव लघ्वपाकि च तत् स्मृतम् ॥

तद्वरौद्यात् कोपयेद् वायुमौष्णयात् पित्तं सशोणितम् ।

मानसं मोहयेत् तैक्ष्णयादङ्गबन्धांश्छनत्यपि ॥

शरीरावयवान् सौक्ष्म्यात् प्रविशेत् विकरोति च ।

आशुत्वादाशु तद्वन्ति व्यवायात् प्रकृतिं ≠ भजेत् ॥

क्वरयेच्च विकाशित्वाद् दोषान् धातुमलानपि ।

वैसर्यादतिरिच्येत् दुश्चकितस्यं च लाघवात् ॥

दुर्जरं चाविपाकित्वात् तस्मात् क्लेशयते चिरम् ।

स्थावरं जंगमं यच्च कृत्रिमं चापि यद्धितम् ।

सद्यो व्यापादयेत् ततु ज्ञेयं दशगुणान्वितम् ॥

\* पूर्वं व्याप्त्याख्यिलं कायं ततः याकं च गच्छति । अवायि तद् यथा भज्ञा फैनड्वाहिसमुद्द्रवम् ॥ फैनमत्र निर्यासः अहीति अहिनाम गुल्म न तु सर्पः ।

+ विकाशीति ओजःशोषणपूर्वकसन्धिबन्धनशैयित्यकारकम् । विसरमिति भेदकम् ।

⊕ प्रकृतिमिति आत्मव्यतीतनिख्यिलदेहम् । भजेदिति व्याप्त्युयात् ।

*Evil properties of the poisons in general.*

The following are the demerits of poisons in general :—(1) capacity for drying up the oily or fatty substance in the system, (2) causing heat, (3) violence, (4) capacity to enter into the minutest part of the body, (5) quickness of action, (6) capacity to spread through the whole of the system without being digested, (7) capacity to dry up the vital fluid which pervades the whole system, and to slacken the joints of the different limbs, (8) capacity to split up (9) lightness, and (10) incapacity for being digested.

A poison has the following functions on account of its possessing the ten demerits mentioned above, respectively :—It (1) increases vayu, (2) increases pittam and vitiates blood, (3) deprives the mind of consciousness and slackens the cohesion of the different limbs to one another, (4) spreads even through the minutest parts of the body and deranges them, (5) can take away life very quickly, (6) attacks the whole of the physical body without being digested at all, (7) destroys the three doshas (vayu, pittam, and kapha), the seven dhatus (chyle, blood, semen, flesh, bone, marrow, and fat), and the dirts (urine, stool, etc.), (8) causes much purgation, (9) is too light to be easily caught hold of and neutralized by medicines, and (10) incapacity for being digested which is the cause of the duration of the trouble due to it.

Any poison, whether organic, inorganic, or artificial, if endowed with all these demerits, has the power to kill life in a short time.

विशेषेण स्थावरविषजनितविकाराः ।

स्थावरं तु ज्वरं हिक्कां दन्तहर्षं गलयहम् ।  
फेनछ्वर्यं रुचिश्वासं मूर्छां च कुरुते विषम् ॥

*Special Troubles due to inorganic poison,*

These are :—fever, hiccough, tickling and irritating sensation in the teeth, swelling of the neck and throat, coming out of froth from the mouth, nausea, aversion to food, difficult respiration, and loss of consciousness.

सहसा विषशीलने विकाराः ।

वेगा ह्यष्ट प्रजायन्ते सहसा विषशीलिनः ।  
प्रथमे त्वग्विकारः स्याद् द्वितीये वेपथुर्भवेत् ॥  
दाहो वेगे तृतीये स्याच् चतुर्थे देहवैकृतम् ।  
फेनोद्रतिः पञ्चमे स्यात् स्कन्धयोर्भृङ्गिता ततः ॥  
वेगे च सप्तमे जाड्यमष्टमे मरणं ध्रुवम् ।  
एवं ज्ञात्वा भिषग्वरः प्रतीकारं समाचरेत् ॥

*Troubles due to a sudden entrance of poison into the system.*

Eight different stages follow the entrance of poison into a human system. In the first stage, there is a discoloration of the skin ; in the second, there is shivering ; in the third, inflammation ; in the fourth, disfigurement of the whole body ; in the fifth,

coming out of froth from the mouth ; in the sixth, breaking of the shoulders ; in the seventh, loss of movement of the limbs ; and the eighth stage is the stage of death.

Having regard to all these, a physician should treat the patient.

### विषजविकारस्य चिकित्सा ।

( १ )

अतिमात्रं विषे भुक्ते वमनं कारयेत् तदा ।  
 अजादुग्धं प्रदद्याच्च यावद् वान्तिनं जायते ॥  
 तदुदुग्धं दोयते पुनः पुनरेव वमेः परम् ।  
 न देयं तत् पुनर्वारं यदा वान्तिर्गमिष्यति ॥  
 अजादुग्धं यदा देहे स्थिरीभवति देहिनः ।  
 विषवेगं तदोक्तीणं जानोयात् कुशलो भिषक् ॥

*Treatment of poison.*

( 1 )

On the entrance of poison into a human system, the patient is to be made to vomit. He is to drink goat's milk so long as he does not commence vomiting. Then he is to continue drinking the same milk after each act of vomiting, till the vomiting stops altogether. The strength of the poison is to be considered nullified as soon as the drinking of goat's milk is followed no more by vomiting. In other words, no more milk is to be drunk by the patient

when it is found that the last draft of milk is not vomited out.

( २ )

अतिमात्रे विषे पीते प्रतिकार्य हि सत्वरम् ।  
 पित्तान्तं वमनं कार्यमजादुग्धस्य पानतः ॥  
 अथवा राजिकाचूर्णलवणवारिशीलनात् ।  
 मदनस्य फलेन वा मीनधौताम्बुनाऽपि वा ॥  
 रेचनं हि तदा कार्यं कफान्तं कविशेखरैः ।  
 गोघृतं च पिबेत् ततो विषम्प्लं जीवनप्रदम् ॥

( २ )

Poison, taken in an excessive quantity, should be remedied at once. The patient is first of all to be made to vomit till he vomits pittam (or bile). The vomiting is to be effected by means of drinking goat's milk ; or water mixed with powdered raji (rye seeds) and saindhava salt ; or madana fruit pestled with water ; or water with which fish has been washed off. After vomiting, the patient is to be purged till kapha or mucus comes out without stool. He is next to drink some cow's ghrita (clarified butter), which is a destroyer of poison and giver of vitality.

( ३ )

विषं हन्याद् रसः पीतो रजनीमेघनादयोः ।  
 सर्पाद्वा टंकनं वापि घृतेन विषहृत् परम् ॥

पुत्रं जीवफलान्तःस्था मज्जा वा निम्बुवारिणा ।  
पीता च लेपिता गात्रे नेत्रयोश्चांजनीकृता ॥

(3)

The following may be used for the purpose of destroying poison :—(a) drinking of the juices of turmeric tuber and meghanada (tanduliya); or (b) gandha-nakuli or tankana, mixed with clarified butter; or (c) kernel of the fruit of putranjiva, drunk with lemon juice, and the same pestled with water and used as a plaster upon the skin and as a collyrium for the eyes.

( ४ )

जातीनीलीश्वरीसिन्धुकाकमाच्यद्रिकर्णिका ।  
त्रिफला करवीरं च कुष्ठं मधुकजीरकम् ॥  
क्षीरबृक्तवगेलेति विषमोऽयं गणः स्मृतः ।  
विषम्बं गोघृतं चैव माङ्गल्यं जीवनं स्मृतम् ॥

(4)

The following group of vegetable drugs is a destroyer of poison :—jati (jessamine), nili (indigo plant), iswari mula, saindhava (rock-salt), kaka-machi, aparajita, triphala, karabira, kushtha, jasthi-madhu, jira, barks of kshira trees, (such as, aswatha, vata, etc.), and ela (cardamoms).

\* ईश्वरीति ईश्वरोमूलं ईशोर मूल इति भाषा ।

Cow's butter (clarified) is also a destroyer of poison.

( ५ )

अतिमात्रे विषे पीते पेयं घृतमनन्तरम् ।  
सभार्गीदधिधूमोत्थसारिवातण्डुलीयकम् ।  
आगारधूममञ्जिष्टायष्ट्वाख्यैश्च समन्वितम् ॥

(5)

If poison is taken in excess, cow's ghrita (clarified butter), mixed with bhargi, dadhi (curd), vajrakshara (kshara prepared from snuhi plant), anantamula, tanduliya, soot (smoke condensed), manjista, and jastimadhu, should be swallowed by the patient.

( ६ )

विषात्तो मधुसर्पिभ्यां चूर्णितामर्जुनत्वचम् ।  
टंकनं मेघनादेन मधुना सह वा पिबेत् ॥

(6)

One who has taken poison in excess should take powdered bark of arjuna, mixed with honey and clarified butter ; or he should take purified tankana mixed with honey and the juice of tanduliya roots.

प्रशस्तविषस्य गुणाः ।

युक्तियुक्तं विषं ज्ञेयं प्राणदायि रसायनम् ।  
योगवाहि त्रिदोषम् वृंहणं वीर्यवर्ज्जनम् ॥

ये दुर्गुणा विषेऽशुद्धे ते स्युर्हीना विशोधनात् ।  
तस्माद् विषं प्रयोगेषु शोधयित्वा प्रयोजयेत् ॥

*Merits of good poisons.*

Poison, if taken in the prescribed way, is an increaser of vitality and curer and preventer of diseases and senility. It is an increaser of the properties, good or evil, of a thing which is taken with it. It pacifies the three doshas, is nutritious, and increases semen. The demerits of salutary poisons are removed by their purification (in the way to be described later). Poisons are, therefore, to be duly purified, before they are used as medicine.

कन्दविषस्य संग्रहविधिः ।

उच्छ्रेत् फलपाकान्ते विषं नवं घनं गुरु ।  
अव्याहतं विषहरैर्वातादिभिरशोषितम् ।  
रक्तसर्षपतैलेन लिपत्वाससि धारयेत् ॥

*How tuber-poison is to be procured.*

Tuber poisons (of course, only those of them which are commendable) are to be taken out only when their fruits have ripened ; when they are still fresh and heavy ; and have not yet been deteriorated by such antipoisonous agencies as wind, etc. Thus procured, they are to be kept wrapped up in clothes saturated with the oil of red mustard seeds.

कन्दविषस्य शोधनम् ।

प्रथमोविधिः ।

कर्त्तिं चणकप्रायं विषं संरच्य भाजने ।  
तत्र गोमूत्रकं क्षिप्त्वा प्रत्यहं नित्यनूतनम् ॥  
शोषयेत् त्रिदिनादूङ्घृ धृत्वा तीव्रातपे ततः ।  
चूर्णितं तत् प्रयुज्ञीत गालितं वाससा विषम् ॥

*Purification of tuber poisons.*

#### First process.

These are purified, if they are cut into pieces of the size of chanaka grams, and kept immersed for three days in a pot containing cow's urine, which is to be replaced by fresh urine after every 24 hours. The pieces are then to be dried by the strong heat of the sun. They are next to be powdered, and sifted through a piece of cloth. The poison, thus purified, may be used in medicines.

द्वितीयोविधिः ।

दोलायां त्रिफलाकाथे छागीकीरे दिवानिशम् ।  
पाचितं शुद्धिमायाति कन्दाख्यं शुभदं विषम् ॥

#### Second process.

Tuber poisons of beneficial nature are purified, if they are boiled, by means of a Dola-Jantram, with decoction of triphala and goats' milk, for 24 hours at a stretch.

तृतीयोविधिः ।

गोमूत्रपूर्णपात्रे च दोलायन्त्रे विषं पचेत् ।  
यामाष्टकं प्रयत्नेन ततोऽयं शुद्धिमाप्नुयात् ॥

Third process.

Poisons are purified, if they are boiled for 24 hours in a Dola-Jantram, filled with cow's urine.

कन्दविषस्य मारणम् ।

समटंकणसंपिष्टं तद्विषं सृतमुच्यते ।  
योजयेत् सर्वरोगेषु न विकारं करोति तत् ॥

*Killing of tuber poison.*

Purified tuber poison is killed, if it is rubbed with an equal quantity of tankana. It may then be used in medicines without producing any disturbance in the system.

विषसेवने पात्रापात्रम् ।

शुद्धं विषं योगवाहं योज्यं योगे रसायने ।  
दातव्यं सर्वरोगेषु घृताशिने हिताशिने ॥  
क्षोराशिने प्रदातव्यं रसायनवते नरे ।  
न क्रोधिते न पित्ताद्ये न छोड़े न नृपालये ॥  
क्षुत्तृष्णाश्रमधर्माध्वशोषिणे क्षयरोगिणे ।  
गर्भिणीबालवृद्धेषु रुक्षेषु न कदाचन ॥  
न दातव्यं न भोक्तव्यं विसंवादे विषं तथा ।  
आचार्यण तु भोक्तव्यं शिष्यप्रत्ययकारणात् ॥

*Persons fit to take poison.*

Purified poison, which is an increaser of the properties of materials with which it is taken internally, should be used as an ingredient of medicines, meant for the cure of diseases only and of those meant for the cure and prevention of disease and senility. It may be applied in all sorts of diseases to one who takes clarified butter, salutary diet, milk, and observes the rules and regulations prescribed for taking a rasayanam.

Poison should not be administered to patients of the following description :—those who are irritable ; those who have an excess of pittam ; those who are impotent ; members of a royal family ; those who are worn out by hunger, thirst, physical strain, perspiration, and travels ; those who have got consumption ; pregnant women, children, old men, and those whose skin and other parts of the body appear to be rough and devoid of oily substance.

Neither should poison be given or taken when there is a quarrel between the physician and the patient. In order to convince the disciple of the wholesomeness of poison, the preceptor himself should take it in the presence of the former.

विषसेवनस्य विधिः ।

अश्वगन्धां त्रिशूलिनं गोजिह्वां त्रिफलामपि ।  
प्रथमं भद्रयित्वा च सेवयेद् गरलं ततः ॥

ब्रह्मचर्यं प्रयत्नेन विषपाने समाचरेत् ।  
 पथ्यं स्वस्थमना भुक्त् । तदा सिञ्चिर्न संशयः ॥  
 गव्यक्षीरघृतं पेयं शालयन्नं भक्षयेत् तथा ।  
 शीतलं च पिबेत् तोयं पित्तलानि विवर्जयेत् ॥  
 जांगलानि च मांसानि छागलोहं च मद्गुरान् ।  
 शर्करां माद्दिकं क्षीरं सर्वं सेव्यं सुशीतलम् ।  
 सेव्यं यत्तात् सदा पथ्यमपथ्यं दूरतस्त्यजेत् ॥  
 विषं युज्जीत नित्यं वै रसायनगुणैषिणः ।  
 घृतोपस्कृतदेहस्य विशुद्धस्य हिताश्विनः ॥  
 सात्त्विकस्योदिते भानौ योज्यं शीतवसन्तयोः ।  
 ग्रीष्मे चात्यधिके व्याधौ न वर्षासु न दुर्दिने ॥

*Directions for taking poison.*

One who wants to take poison as a medicine should take, first of all, a decoction of aswa-gandha, gojihva, and triphala, mixed with mercury (either incinerated or in a state of compound with sulphur), and should commence taking poison from the next day. One who takes poison should observe the following directions during the period he takes the poison :—(1) He should abstain from sexual intercourse ; (2) should take his diet without any perturbation of the mind ; (3) should take cow's milk and clarified butter, with rice of shali paddy ; (4) should drink cold water, meat of jangala animals, goat's blood, madgura fish, sugar, honey, and milk—

everything cold ; and (5) whatever he should take should be salutary according to the Ayurveda.

The man who wishes to prevent or cure diseases as well as senility may take poison every day (in doses to be described below). Such a man should be of pure character, and should have previously refined his system by drinking clarified butter and taking salutary diet. Poison should be taken in the winter and spring. In cases of emergency, it may also be taken in summer, but should never be taken in the rainy season and in a bad weather.

विषमक्षणे मात्रा ।

आरोटं ॥ भक्षयेत् पुण्यं विषं सर्षपमात्रकम् ।  
 प्रथमे दिवसे पश्चाद् द्वितीयादौ द्विसर्षपम् ॥  
 पश्चमे दिवसे विषं भक्षयेत् सर्षपत्रयम् ।  
 षट् सप्ताष्टदिनेऽप्येवं नवमे वेदसंख्यया ॥  
 भक्षयेद् राजिकावृद्धया यावद् गुज्जामितं भवेत् ।  
 यवमात्रं ग्रसेत् सुस्थो गुज्जामात्रं तु कुष्ठवान् ॥  
 मासमात्रप्रयोगेण कुष्ठानष्ट हरेद् विषम् ।  
 पुण्डरीकं सविस्फोटं श्वेतमौदुम्बरं तथा ॥  
 क्षिञ्चन्मिञ्चं कापालाख्यं क्षिञ्चाह्वं शवगन्धि च ।  
 पण्मासस्य प्रयोगेण कामरूपो भवेन्नरः ॥  
 संवत् सरप्रयोगेण दिव्यदेहो भवेत् स हि ॥

\* आरोटमिति सुशोधितम् ।

मात्रया भक्षितं यत्तादु विषमप्यमृतायते ।  
 अमृतं सहसा युक्तं शोलितं विषमेव वा ॥  
 सर्वविधविकाराय मृत्यवे वा न संशयः ॥

*Doses in which poison is to be taken.*

The dose in which good and purified poisons are to be taken is one sarshapa on the first day; two sarshapas a day on the second, third, and fourth days; three sarshapas on the fifth, sixth, seventh, and eighth days; four sarshapas on the ninth day. The dose is to be increased by one sarshapa a day till it reaches one gunja or 36 sarshapas. A healthy man should not take more than one java or six sarshapas a day, but a leper should take one gunja in the maximum.

One month's use of poison, in the prescribed way, cures kushta (leprosy) of eight different kinds, viz. pundarika, kustha with bisphota, white kustha or leucoderma, audumbara, chhinna-bhinna, kapala, klinna, and shavagandhi.\*

Six month's use of poison makes a man beautiful. One year's use cures all sorts of diseases. Two year's use makes a man have a very beautiful complexion.

Taken in proper doses, poison acts like nectar. On the other hand, nectar or poison, taken all on a sudden, causes all sorts of troubles and even death.

\* These should be compared with those given in Madhava Nidanam etc.

विषसेवने पथ्यम् ।

घृतं चीरं सितां चौद्रं गोधूमं सिद्धतण्डुलम् ॥  
मरिचं सैन्धवं द्राक्षां मधुरं पानकं हिमम् ॥  
ब्रह्मचर्यं हिमं देशं हिमं कालं हिमं जलम् ।  
विषस्य सेवको मत्त्यो भजेदतिविचक्षणः ॥

*Diets considered salutary at the time of taking poison.*

The following are considered beneficial to one who takes poison :—

Clarified butter, milk, sugar, honey, wheat, rice prepared from boiling paddy and then drying it up and removing the husk in the usual way, maricha (black pepper), rock-salt, raisin, sweet and cold water, abstinence from sexual indulgence, residing in cold country, cold weather, and cold water.

विषसेवने अपथ्यम् ।

अभ्यस्तेऽपि विषे यत्ताद् वर्जनीयान् विवर्जयेत् ।  
कटुम्ललवणं तैलं दिवास्वमानलातपान् ॥

\* तण्डुलं द्विविधं यथा आतपतण्डुलं सिद्धतण्डुलं च । केवल-सूर्यातपयोगपूर्वकधान्योक्ति ( ढिंकि ) धातेन धान्यतुष्मपसार्य यत् तण्डुलं निर्मीयते, तदातपतण्डुलं कथ्यते । आदौ जलसिद्धं धान्यं पूर्वोक्तप्रकारेण निस्तुषीकृतं तु सिद्धतण्डुलमित्यभिधीयते । पूर्वं कथञ्चिद् वायुवर्द्धकमन्तिमं तु तदोषविरहितं लघुतरं चेति विझेयम् ।

दृग्विभ्रमं कर्णरुजमन्यांश्चानिलजान् गदान् ।  
विषं रुक्षाशिनः कुर्यान् मृत्युमेव त्वजीर्णिनः ॥

*Restrictions in diet in poison.*

The following are to be avoided during the time poison is taken, even if one gets accustomed to it:—pungents, sour, saline food, oil, sleeping in day time, and heat of fire and of the sun. The man who, while taking poison, takes his diet without clarified butter being mixed with it, suffers from derangement of the eye-sight, diseases of the ears, and many other diseases due to the excess of vayu. Taking of poison by one who suffers from indigestion may lead even to one's death.

विषस्य प्रयोगः ।

वातज्वरे विषं पेयं मस्तुना सहितं तथा ।  
क्षीरेण सहितं तनु पातव्यं पित्तजे ज्वरे ॥  
कफजे छागभूत्रेण सर्वजे त्रिफलाम्भसा ।  
रोधचन्दनषड्घन्थाशर्कराघृतमाच्चिकैः ॥  
क्षीरेण च विषं युक्तं जीर्णज्वरहरं परम् ।  
निकुम्भकुम्भत्रिफलासपिंमधुविषैः कृतः ॥  
निहन्ति मोदको जीर्णज्वरमेहत्वगामयान् ।  
शिखिकण्ठिरसोपेतं विषमज्वरजिद् विषम् ॥

*Uses of inorganic poison.*

Inorganic poison of a benefic nature (such as aconite) and duly purified, cures fever due to vayu, if taken with mastu (butter-milk). It cures fever due to pittam, if taken with milk, and that due to kapha, if taken with goat's urine. Fever due to the three doshas is cured by poison taken with triphala water. Jeerna-jwara (a kind of remittent fever) is cured by poison, taken with lodhra, chandana, bacha, sugar, ghrita, honey, and milk. Jeerna-jwara, prameha, and skin diseases are cured by poison, taken with root of danti, root of trivrit, triphala, ghrita, and madhu (honey). Poison cures vishama-jwara (Malaria, kala-azar, etc.), if taken with the juice of shikhi-karna (nila-kantha vasaka).

विषं यष्ट्याहृयं रास्ता सेव्यमुत्पलकन्दकम् ।

तन्दुलोद्धकपीतानि रक्तपित्तस्य भेषजम् ॥

रास्ताविड्ज्ञत्रिफलादेवदारुकटूत्रयम् ।

पद्मकं द्वौद्रमसृता विषं च श्वासकासजित् ॥

सिता रसविषक्षीरप्रवालमधुकान्विता ।

श्वासहिक्षापहा लीढा छर्दिष्ठा तु विषान्विता ॥

क्षीरोशीरमधुक्षाररजनोकूटजत्वचः ।

च्यवनप्राशसंयुक्तं विषं क्षपयति क्षयम् ॥

Racta-pitta is cured, if poison is taken with jasti-madhu, rasona, ushira, and root of utpala (water lily), all rubbed with water dissolved with powdered rice.

Asthma and cough are cured, if poison is taken with rasona, viranga, triphala, deva-daru, trikatu, padma wood, and guruchi. Asthma and hiccough are cured, if poison is taken with sugar, mercury, milk, ashes of pravala (coral), and jasti-madhu. Poison cures nausea, if taken with milk, ushira, madhu, java-kshara, haridra, and bark of kutaja. It cures phthisis, if taken with chyavana prasa (a well-known medicine to be described in a subsequent volume).

**मुस्तावत्सकपाठाम्बिद्योषप्रतिविषाविषम् ।**

**धातकीमोचनिर्यासं चूतास्थि ग्रहणीहरम् ॥**

**कृच्छ्रद्धा॑ विषपथ्या॒ मिदन्तीद्राक्षानिशावृषाः ।**

**शिलाजतु॑ विषं त्रूथषमुदावत्ताश्मरीहरम् ॥**

Musta, indra-java, patha, chirakra root, trikatu, ati-visha, dhataki flower, mocha-rasa (exudation of kapock tree), kernel of the stone of a mango fruit, and poison, all combined, cure chronic diarrhoea. Poison, haritaki, chirakra roots (or bhallataka ?), danti roots, draksa (raisin), haridra, and vasaka, all mixed together, can cure difficulty in urination. Shilajatu, poison, and trikatu, mixed together, can cure ashmari and udavarta.

**गोमूत्रक्षारसिन्धूत्थविषपाषाणभेदकम् ।**

**वज्रवद् दारयत्येतदेकतः पीतमश्मरीम् ॥**

त्रिफलास्वर्जिकाक्षारैर्विषं गुल्मप्रभेदनम् ।  
 पिप्पली पिप्पलीमूलं विषं शूलहरं तथा ॥  
 विषं द्रवन्ती मधूकं द्राक्षारास्नाशठीकणाः ।  
 विषा वेलमिशिक्षारं गुल्मप्लीहनिवर्हणम् ॥  
 प्लीहोदरन्नं पयसा शताह्वा कृमिजिद् विषम् ।  
 वायसीमूलनिष्काथयुतं कुष्ठहरं विषम् ॥  
 पयस्या ॥ राजवृक्षत्वक् त्रायन्ती वाकुची वला ।  
 प्लीहन्मीभकणा एषां काथेन कुष्ठजिद् विषं ॥

Cow's urine, java-kshara, saindhava salt, tuber poison, all mixed with the juice of pashana-bhedi can cure stone disease. Tuber-poison, mixed with triphala and swarji-kshara, can cure gulma (tumours in the belly). Tuber-poison with pippali roots can cure colic. Dravanti, madhuka, draksha, rasna, shathi, pippali, ati-visha, biranga, mishreyi (ani-seed) and java-kshara, all mixed with tuber-poison, can cure gulma and enlargement of the spleen. Sulpha, biranga, and tuber-poison, taken with milk, can cure enlargement of the spleen. Tuber-poison, taken with the decoction of the roots of kaka-machi, is a curer of leprosy.

Leprosy is cured, if tuber-poison is taken with decoction of arka-puspi, arag-badha, trayamana, ba-kuchi, bala, rohitaka, and gaja-pippali.

\* पयस्येति अर्कपुष्पी ओक्करा इति भाषा ।

## अथ जंगमविषम् ।

जंगमस्य विषस्योक्तान्यधिष्ठानानि षोडशः । तत्र दूषिनिःश्वास-  
दंष्ट्रानखमूत्रपुरीषशुकलालार्त्तवसुखसंदशविषर्द्धित-गुदास्थिपित्तशूकशवा-  
नीति । अत्र विस्तरार्थं सुश्रुतस्य कल्पस्थाने तृतीयोऽध्यायो द्रष्टव्यः ।

विषेषु जंगमाख्येषु ग्राह्यं नागोद्भवं विषम् ।  
शस्तं बलवतो यूनः कुषणसर्पाद् विषं नवम् ॥  
एतच्चैवागदश्रेष्ठं त्रिदोषक्षपणं क्रमात् ।  
दीपनं कुरुते सद्यो वाङ्वाञ्छिसमं हि तत् ॥  
सन्निपातप्रतीकारप्रभावप्रभुरुच्यते ।  
यथाविधिप्रयुक्तं तद् विषमप्यमृतायते ।  
मृतसञ्जीवनं तद्धि विसूचिषु ज्वरेषु च ॥

### ORGANIC POISON.

There are sixteen different sources of organic poisons, viz. eye-sight, respiration, teeth, nails, urine, stool, semen, saliva, mense-blood, sting, a peculiarly ugly sound made by the rectum, rectum, bone, bile, bristles, and carcases. (For details, see Chapter III, Kalpa-sthanam, Sushruta).

Of all the organic poisons, only poison of snakes is to be utilized for medicinal purposes. The poison obtained from a youthfull black serpent (cobra) is preferable to that obtained from other serpents. This poison also has a great healing property. It gradu-

ally pacifies the three doshas. It increases enormously the power of digestion, as soon as it is taken internally (cf course, in the manner to be prescribed in vol. IV and the subsequent volumes). In curing diseases due to the abnormal excess of the three doshas, it is the master of all the drugs. Duly applied, it also acts like nectar, and is a reviver of the dead in cholera and in fever due to the three doshas.

सप्तविषस्य शोधनम् ।

प्रथमोविधिः ।

नागोद्भवं यथाप्राप्तं विषं गोमूत्रसंयुतम् ।  
आतपे त्रिदिनं शुष्कं निहितं वीर्यधृग् भवेत् ॥

*Purification of serpent poison.*

**First process.**

Snake poison, in whatever way it may be obtained, is rendered powerful by mixing it with cow's urine and drying it up by sun's rays for three days.

द्वितीयोविधिः ।

सर्पपतैलसंप्लुतं सर्पविषं विशुद्धति ॥

**Second process.**

Snake-poison is purified, if it is mixed with mustard oil.

तृतीयोविधिः ।

पर्णतोयैर्मुनिवृक्ततुलसीपत्रयो रसैः ।  
काथेनापि च कुष्ठस्य भावयेत् तत् त्रिधा त्रिधा ।  
तदेव सर्वदा योज्यं नाविशुद्धं कदाचन ॥

### Third process.

Snake poison is purified, if it is subjected to bhavana, for three times each, with the juice of tam-bula, juice of the leaves of vaka, juice of the tulasi leaves, and decoction of kustha.

विशेषेण जंगमविष-जनितविकाराः ।

निद्रां तन्द्रां फ्लमं दाहं सफेणं लोमहर्षणम् ।  
शोथं चैवातिसारं च कुरुते जंगमं विषम् ॥

### *Symptoms due to organic poison.*

These are sleep, drowsiness, fatigue, inflammation, coming out of froth from the mouth, standing of hair on end, swelling, and diarrhoea.

सर्पदंशनप्रतिकारः ।\*

जयपालस्य मज्जानं भावयेन् निम्बुकद्रवैः ।  
एकविंशतिवारं तु ततो वर्त्ति प्रकल्पयेत् ॥

\* परत्वर्त्तिखण्डे विषचिकित्साध्याये सविस्तरं वर्णितः ।

मनुष्यलालया घृष्टा ततो नेत्रे प्रदापयेत् ।  
सर्पदंष्ट्राविषं जित्वा संजीवयति मानवम् ॥

*Remedy of snake-bite.*

Kernel of jayapala seed (previously purified) is to be subjected to bhavana for 21 times with lemon juice. It is then to be made into pills. Such a pill, rubbed with man's saliva, is to be put into the eyes, as a collyrium, of the man who has been bitten by a poisonous snake. By this, the man will be able to overcome snake-poison.\*

\* The subject will be dealt with elaborately in a subsequent volume in the chapter on treatment of poison.

## अष्टमोऽध्यायः ।

### अथोपविषाणि ।

सुखर्कलांगलीगुञ्जाहयारिविषमुष्टिकाः ।  
 कनकं जयपालश्च भल्लातकं च निर्विषा ॥  
 अतिविषाहिफेनं च जयाचोपविषाः स्मृताः ।  
 त्रयोदशकमेतत् तु विषवत् प्राणहारकम् ॥  
 विषैश्चोपविषैर्घृष्टश्छल्पकः शिवो भवेत् ।  
 मुखं च जायते तस्य धातूंश्च ग्रसते त्वरा ॥\*

### CHAPTER VII.

#### UPABISHA (SEMI-POISONS).

The following are considered semi-poisons :— Snuhi, arka, langali, gunja, karabira, visha-musti, dhattura, jayapala, bhallataka, nirvisha, ativisha, ahiphena, and jaya (bhanga). These thirteen are also killers of life, if taken in excess.

Rubbed with poisons and the semi-poisons, mercury becomes deprived of its wings, and grows hungry. It is then able to swallow and digest metals (without increasing in weight).†

\* प्रथमस्त्रणहे ७५ पृष्ठं ग्रन्थम् ।

† See page 76, Vol. I.

सामान्येनोपचिषाणां शोधनम् ।

उपविषं विशुद्धति पञ्चगव्यैर्विभावितम् ॥  
शोध्यं च दोलिकायन्त्रे क्षीरपूर्णेऽथ पात्रके ॥

*Purification of semi-poisons in general.*

All the semi-poisons are purified, if subjected to bhavana with the pancha-gavya (milk, curd, clarified butter, urine, and dung of cow).

They are also purified by being boiled with milk by means of a Dola-Jantram.

( १ ) स्तुही ।

सेहुण्डः सिंहतुण्डः स्याद्वज्री वज्रद् मोऽपि च ।  
सुधा समस्तदुग्धा च स्तुक् तथा स्यात् स्तुही गुडा ॥  
सेहुण्डो रेचनस्तीक्षणो दीपनो कटुको गुरुः ।  
शूलामाषीलिकाध्मानकफगुल्मोदरानिलान् ॥  
उन्मादमेहकुष्ठार्शः शोथमेदोऽशमपाण्डुताः ।  
ब्रणशोथज्वरप्लीहविषदूषीविषं हरेत् ॥†  
उषणवीयं स्तुहीकीरं स्त्रिघं च कटुकं लघु ।  
गुल्मनां कुष्ठिनां चापि तथैवोदररोगिणाम् ।  
हितमेतद् विरेकार्थं ये चान्ये दीर्घरोगिणः ॥

\* क्षीरं दधि तथा चाज्यं मूत्रं गोमयमेव च । इति पञ्चगव्यम् ।

† दूषीविषमिति गरविषम् ।

(1) *Snuhi.*

*Snuhi* is laxative, strong, increaser of hunger, pungent, and heavy. It cures colic, mucus, asthila (growth of a lump of flesh alongside the navel), swelling of the belly by wind, kapha, gulma, wind in the stomach, insanity, sperma-torrhœa, leprosy, piles, dropsy, obesity, stone-disease, anemia, boils, fever, enlargement of the spleen, poison, and artificial poison.

The milk of *snuhi* is warm in effect, soothing, pungent, and light. It is effective for the purpose of moving the bowels to those who suffer from gulma, leprosy, udara-roga, or some other chronic diseases.

स्तुहीक्षीरस्य शोधमम् ।

चिञ्चापत्ररसे कर्षे वस्त्रपूते पलद्वयम् ।

स्तुहीक्षीरं विभावयेत् रौद्रमध्ये प्रयत्नतः ।

द्रवे शुष्के समुत्तार्य सर्वरोगेषु योजयेत् ॥

*Purification of the milk of snuhi.*

One tola of the juice of the leaves of *chincha*, filtered by means of a piece of cloth, is to be mixed with eight tolas of the milk of *arka*<sup>4</sup>. The liquid is then to be dried by the heat of the sun. Thus dried, the milk of *arka* becomes purified, and may then be used, where necessary.

( २ ) अर्कः ।

श्वेतार्को गणरूपः स्यान् मन्दारो वसुकोऽपि च ।  
 श्वेतपुष्पः सदापुष्पः स चालकः प्रतापसः ॥  
 रक्तोऽपरोऽर्कनामा स्यादकंपणे विकीरणः ।  
 रक्तपुष्पः शुद्धफलस्तथास्फोतः प्रकीर्तिः ॥  
 अर्कद्वयं सरं वातकुष्ठकण्डुविषवणान् ।  
 निहन्ति प्लीहगुलमार्शः श्लेष्मोदरशकृत्क्रिमीन् ॥  
 अलर्ककुसुमं वृष्यं लघु दीपनपाचनम् ।  
 अरोचकप्रसेकार्शः कासश्वासनिवारणम् ॥  
 रक्तार्कपुष्पं मधुरं सतिकं  
 कुष्ठक्रिमिन्नं कफनाशनं च ।  
 अशोविषं हन्ति च रक्तपित्तं  
 संप्राहि गुलमे श्वयथौ हितं तत् ॥  
 क्षीरमर्कस्य तिक्तोषणं ह्लिघ्दं सलवणं लघु ।  
 कुष्ठगुलमोदरहरं श्रेष्ठमेतद् विरेचनम् ॥

(2) *Arka.*

Arka is of two kinds, viz. white and red. Both of them are laxative, and cure diseases due to vayu, leprosy, itches, poison, carbuncle, enlargement of the spleen, gulma, piles, phlegm, udara-roga, and worms in the stool.

Flower of white arka is nutritious, light, digestive,

and curer of aversion to food, emission of phlegm, piles, cough, and asthma.

Flower of red arka is sweet, bitter, and curer of leprosy, worms, phlegm, piles, poison, and racta-pitta. It is increaser of appetite and power of digestion, and beneficial in gulma and dropsy.

The milk of arka is bitter and warm, soothing, saltish, and light. It cures leprosy, gulma, udara-roga, and is a laxative.

( ३ ) लांगली ।

हलिनी कलिहारी च शक्रपुष्पी च लांगली ।  
 विशल्याऽग्निशिखाऽनन्ता वह्निवक्त्रा च गर्भनुत् ॥  
 कलिहारी सरा कुषशोफाशोव्रणशूलजित् ।  
 सद्वारा श्लेष्मजित् तिक्ता कटुका तुवराऽपि च ॥  
 तीदणोष्णा क्रिमिहृल् लघ्वो पित्तला गर्भपातिनी ॥

(3) *Langali.*

*Langali* is laxative. It is efficacious in leprosy, dropsy, piles, boils, and colic. It contains kshara (alkali). It cures cough and worms. It is bitter, pungent, astringent, strong, warm, and light. It increases pitta and can cause abortion.

लांगला शोधनम् ।

लांगली शुद्धिमायाति दिनं गोमूत्रसंस्थिता ।

*Purification of Langali.*

Langali is purified, if kept immersed for one day in cow's urine.

( ४ ) गुज्जा ।

श्वेता गुञ्जोच्चटा प्रोक्ता कृष्णला चापि सा स्मृता ।  
रक्ता सा काकचिश्ची स्यात् काकणन्ती च रक्तिका ॥  
कृष्णला काकतिका च सांगुष्ठा च शिखरिण्डनी ।  
रुद्धा च काकजङ्घा च कणीचि काकतुण्डिका ॥  
काका च काकिणी सौम्या काश्ची कृष्णलकस्तथा ।  
काकजिञ्जा शिखरण्डी च कम्बोजी भिष्मभूषणा ॥  
चूडामणिस्तथारुणा शीतपाकी च ताम्रिका ।  
रक्ता श्यामलचूडा च वन्या च कृष्णचूडिका ।  
काकादनी काकपीलुः सा स्मृताङ्गारवल्लरी ॥  
गुज्जाद्रयं तु केशं स्याह वातपित्तज्वरापहम् ।  
मुखशोषन्नमश्वासतृष्णामदविनाशनम् ॥  
नेत्रामयहरं वृष्यं बल्यं करण्डूब्रणं हरेत् ।  
क्रिमीन्द्रलुसकुष्ठानि रक्ता च धवलाऽपि च ॥  
वामकं ताम्रिकामूलमुच्चटावीजकं तथा ।  
उच्चटापत्रकं हितं वशीकार्ये विशेषतः ।  
पत्रं गुज्जाद्रयस्य हि हितं शूले तथा विषे ॥

(4) *Gunja.*

Gunja is of two kinds, viz. white and red. Both of them are beneficial to hair and pacifier of vayu, pittam, and fever. They cure dryness of the mouth, giddiness, asthma, thirst, intoxication, and eye-diseases. They are nutritious, strengthening, and curer of boils growing out of itches, worms, baldness, and leprosy.

Roots of both kinds of gunja and seeds of white gunja cause vomitting. Leaves of white gunja are especially efficacious in attracting affection of others. Leaves of both kinds of gunja are efficacious in colic and poison.

गुञ्जायाः शोधनम् ।

गुञ्जा काञ्जिकसंस्थिना प्रहराच्छुद्ध्यति ध्रुवम् ।

*Purification of Gunja.*

It is purified, if boiled with kanji for 3 hours.

श्वेतगुञ्जायाः व्यवहारः ।

श्वेतगुञ्जापत्रलेपात् तद्रससेचनात् तथा ।

विषाक्तशब्दघातोत्थक्तान् मुक्तिमवाप्नुयात् ॥

*Use of white gunja.*

Wounds due to poisonous instruments are healed up by their being washed with the juice of the leaves of white gunja, and by a paste made of the same leaves used as a plaster.

(५) करवीरः ।

करवीरः श्वेतपुष्पः शतकुम्भोऽश्वमारकः ।  
द्वितीयो रक्तपुष्पश्च चण्डातो लगुडस्तथा ॥  
तृतीयः पीतपुष्पश्च कृष्णपुष्पश्चतुर्थकः ।  
पाटलकुम्भश्चान्यः पञ्चैते करवीरकाः ॥  
करवीरगणस्तिक्तः कषायः कटुकश्च वै ।  
क्षतलाधवकून् नेत्रकोपकुष्ठव्रणापहः ॥  
वीर्योष्णः क्रिमिकरण्डून्नो भक्षितो विषवन् मतः ॥  
पीतपुष्पस्तथा कृष्णपुष्पश्च श्वेतपुष्पवत् ।  
हयानां मारकौ चैव कुष्ठादिषु हितप्रदौ ॥  
पाटलकरवीरस्तु शिरोरुक्कफवातहृत् ॥  
श्वेतस्य पूर्वदिग्वर्त्तिमूलमहिविषं जयेत् ॥

(5) *Kiravira.*

Karavira is of five different kinds, according to the colour of its flower. viz. (a) white (b) red, (c) yellow, (d) black, and (e) violet.

All of them are bitter, astringent, pungent, and are efficacious in ulcers, irritation of the eyes, leprosy, and boils. They are warm in their effect on the system. They cure worms and itches. They are to be used in the same way as poisons.

The white, yellow, and black varieties of karavira are killers of horses. The violet variety is a pacifier.

of head-ache, and diseases due to kapha and vayu. The root of a white karavira proceeding east-ward is efficacious in snake-poison.

करवीरस्य शोधनम् ।

गोदुग्धे दोलिकास्वेदाद् धयाराति विशुद्ध्यति ।

*Purification of karavira.*

Karavira is purified, if boiled with milk by means of Dola-Jantram.

(६) विषमुष्टि: ।

विषमुष्टिर्जलदश्च कुचिला दीर्घपत्रकः ।

कुपीलुः कुलकः काकतिन्दुकः काकपीलुकः ॥

कारस्करः कुपाकश्च कालपाकश्च रस्यकः ।

काकेन्दुर्विषतिन्दुश्च तथा मर्कटतिन्दुकः ॥

कुपीलु शीतलं तिक्तं वातलं मदकृल् लघु ।

परं व्यथाहरं ग्राहि \* कफपित्तास्थनाशनम् ॥

(6) *Visha-musti (kuchila).*

Kuchila (nox-vomica) produces a cooling effect on the system. It is bitter, increaser of a slight vayu, intoxicating, light, highly remover of pain,

\* दीपनं पाचकं यत् स्यादुष्णत्वाद् द्रवशोषणम् । ग्राहि तच्च यथा शुण्ठी जीरकं गजपिप्पली ॥ दीपनमिति जठराम्बदीपनं पाचनमिति आमपाचनम् ।

increaser of hunger, digestive, and destroyer of phlegm, pitta, blood, and (necessarily racta-pitta).

विषमुष्टे: शोधनम् ।  
प्रथमोविधिः ।

दोलायन्त्रेन संस्तिन्नः कांजिके प्रहरद्रव्यम् ।  
किञ्चिदाज्येन भृष्टश्च विषमुष्टिर्विशुध्यति ॥

*Purification of visha-musti.*

**First process.**

Visha-musti (kuchila) is purified, if it is boiled with kanji for six hours by means of a Dola-Jantram, and then fried well with a little of clarified butter (till it is reduced to charcoal).

द्वितीयोविधिः ।

स्विन्नो गोमयवारिभ्यां दोलायां पयसा ततः ।  
घृतेनातः परं भृष्टो विषतिन्दुर्विशुध्यति ॥

**Second process.**

Visha-musti is purified, if it is boiled by means of a Dola-Jantram with cowdung mixed with water, then with milk, and then fried with clarified butter (till it is reduced to char-coal).

(७) घुस्तूरः ।

घुस्तूरो देवता धूर्त्त उन्मत्तः कनकाहृयः ।  
धत्तूरः कितवस्तूरी महामोही शिवप्रियः ॥

मातुलो मदनश्चास्य फलं मातुलपुत्रकः ।  
 धुस्तूरो मदवण्णग्निवात्कृज्ज्वरकृष्टनुत् ॥  
 कषायो मधुरस्तिक्तो यूकालिक्ताविनाशकः ।  
 उषणो गुरुर्वणश्लेष्मकरडूक्तमिविषापहः ॥

(7) *Dhustura (strammonium)*

Dhattura increases intoxication, complexion, hunger, and vayu. It cures fever and leprosy. It is astringent, sweet, bitter, warm, and heavy. It destroys lice, boils, phlegm, itches, worms, and poisons.

धुस्तूरस्य शोधनम् ।  
 धूर्त्तबीजं चतुर्यामं गोमूत्रे निहितं पुनः ।  
 कण्ठितं निस्तुषं कृत्वा योगेषु विनियोजयेत् ॥

*Purification of dhattura.*

Seeds of dhattura are purified, if they are kept immersed, for 12 hours, in cow's urine, and then deprived of their husks, by being thrashed with an iron rod in an iron mortar.

(8) जयपालः ।

जैपालो जयपालश्च चक्रदन्ती विरेचनः ।  
 मलद्रावी कुम्भीबीजं कुम्भनीबीजमेव च ॥  
 घणटाबीजं च घणटणौबीजं निकुम्भबीजकम् ।  
 रेचनबीजसंज्ञोऽयं शोधनबीजमेव च ॥

जयपालो गुरुः स्त्रिंघो रेची पित्तकफापहः ।  
अशुद्धोऽयमसून् हन्ति शुद्धोऽसौ सेव्यते लपतः ॥

(8) *Jayapala (croton seeds).*

*Jayapala* is heavy, remover of coarseness of the body, highly purgative, and pacifier of pittam and kapha. It takes away life, if taken unpurified and in excessive quantity. It should be taken purified, and in doses not exceeding one fourth of a racti a day.

जयपालस्य शोधनम् ।

प्रथमो विधिः ।

पञ्चगव्येषु संशोध्य दूरीकार्यास्तु जिह्विकाः ।  
ततोऽम्लवर्गे दशधा क्षारवर्गे त्रिधा पुनः ॥  
कुमारीकोद्रवक्षारजले चैव विशोधयेत् ।  
शुद्ध एवं हि जैपालो वान्तिदाहविवर्जितः ॥

*Purification of Jayapala.*

*First process.*

*Jayapala* seeds are purified, in the following way :—They are first of all to be boiled with the pancha-gavya (see page 331). Scale-like tissues, which are found inside the seeds, are then to be removed. The seeds are then to be treated (i.e. boiled or subjected to bhavana) with the amla-varga (vegetable acids) for ten times, with the ksharas for three times, with the juice of kanya for once only,

and with the solution of a kshara prepared from kodrava (a kind of paddy), for once only. Thus purified, jayapala seeds do not cause vomitting or inflammation.

द्वितीयो विधिः ।

जैपालं रहितं त्वगंकुर ० रसैश्चाङ्गिर्मले माहिषे  
निक्षिसं त्रयहमुष्णातोयविमलं खल्वे सवस्त्रार्दितम् ।  
लिसं नूतनखर्परेषु विगतस्नेहं रजःसंनिभं  
निम्बूकाम्बुविभावितं च बहुशः शुद्धं गुणाद्यं भवेत् ॥

### Second process.

Jayapala seeds are first of all to be deprived of their skins, internal scales, and of their juices by being washed off with water. They are then to be kept concealed in the dung of buffalo for three days. They are next to be washed off with hot water and cleansed. Then they are to be rubbed with a piece of rag (which is meant to soak the oil) in a mortar. Next, they are to plaster the surface of a new earthen basin (which is to soak the rest of the oil). The jayapala is thus deprived of oil, and appear like dust. It is then to be subjected to bhavana for several times with lemon-juice. Thus purified, jayapala become excellent in quality.

\* अंकुरमिति जयपालशीजजिह्विका ।

तृतीयो विधिः ।

वस्त्रे बद्धा तु जैपालं गोमयस्योदके न्यसेत् ।  
पाचयेद् याममात्रं तु ततोऽयं शुद्धतां व्रजेत् ॥

### Third process.

Jayapala seeds (deprived of their skins and scales) are purified, if they are boiled for three hours with the juice of buffalo stool,

चतुर्थो विधिः ।

जैपालं निस्तुषं कृत्वा दुग्धे दोलायुते पचेत् ।  
अन्तर्जिह्वां परित्यज्य युञ्ज्याच्च रसकर्मणि ॥

### Fourth process.

Jayapala seeds are purified, if they are deprived of their skins and internal scales, and then boiled with milk by means of a Dola-Jantram.

( ६ ) भल्लातकम् ।

भल्लातकं त्रिषु ० प्रोक्तमस्कोऽरुष्करोऽग्निकः ।  
तथैवाग्निमुखी भल्ली वीरवृक्षश्च शोफहृत् ॥  
वीरतर्वनलाहृयो व्रणहृदभूतनाशकः ।  
अन्तःसत्त्वाहृला शैलबीजो निर्दहनस्तथा ॥  
क्रिमिद्वस्तपनश्चैव वातारिः स्फोटबीजकः ।  
महातीक्षणः पृथग्बीजो बीजवृक्षो धनुस्तरः ॥

\* त्रिषु इति त्रिषु लिङ्गेषु ।

भङ्गातकफलं पक्वं स्वादुपाकरसं लघु ।  
 कषायं पाचनं स्त्रिघ्नं तीक्ष्णोषणं छेदि भेदनम् ॥  
 मेध्यं वह्निकरं हन्ति कफवात्त्रणोदरम् ।  
 कुष्ठाशरोग्रहणीगुल्मशोफानाहज्वरक्रिमीन् ॥  
 वृन्तमारुष्करं स्वादु पित्तम् केश्यमस्तुत् ।  
 मज्जा भङ्गातकस्य हि कषायो मधुरो लघुः ।  
 वृष्यश्वोषणस्तथा शुक्रप्रदश्च कफवात्त्वा ॥  
 हन्ति सर्वोदरानाहकुष्ठाशरोग्रहणीगदान् ।  
 तथा गुल्मज्वरश्वित्रवह्निमान्वक्रिमित्रणान् ॥

(9) *Bhallataka.*

Ripe fruits of bhallataka are sweet when digested, light, astringent, digestive, soothing, acrid, warm, reducer of fat, purgative, increaser of retentive faculties, and increaser of hunger. They destroy phlegm, vayu, sores, udara-roga, leprosy, piles, chronic diarrhoea, gulma, dropsy, intestinal obstruction, fever, and worms.

Stems of bhallataka fruits are sweet, pacifier of pittam, beneficial to hair, and increaser of power of digestion.

Oil or marrow of bhallataka (which are generally used in medicines) are astringent, sweet, light, nutritive, warm, increaser of semen, pacifier of vayu and kapha. It destroys all sorts of udara-roga, intestinal obstruction, leprosy, piles, chronic diarr-

hoea, gulma, fever, leucoderma, loss of digestive power, worms and carbuncles.

भल्लातकमज्जनिष्कर्षणम् ।

भल्लातकफलं पकं संमानीय च्छिपेज् जले ।  
 मज्जति यदि तत् तत्र तदैव तन्नियोजयेत् ॥  
 इष्टकाचूर्णसञ्चयैर्धर्षणाद् विमलं भवेत् ।  
 शस्यान् मुक्तं फलं तच्च बीजरूपं ग्रहीष्यति ॥  
 ईदशान्यग्निवीजानि खण्डितानि ततः परम् ।  
 लौहपत्रे पचेद् यत्ताद् वारिणा हि बहुक्षणम् ॥  
 मज्जा भल्लातकस्येत्थं निर्गच्छेदग्नियोगतः ।  
 सन्तरेत् कृष्णवर्णश्च वारिपृष्ठे शनैः शनैः ॥  
 समुद्धरेत् प्रयत्नात् तं यावदसौ बहिर्भवेत् ।  
 निःशेषमागते तस्मिन् हुताशनं निवापयेत् ॥  
 अथवा पातयेत् सत्त्वं भल्लातकफलस्य वै ।  
 पातालयन्त्रयोगेन मज्जरूपं यथाविधि ॥०

*Extraction of the essence (oil) of bhallataka fruits.*

For the purpose of extraction of oil or essence of bhallataka fruits, only those which are ripe and sink in water are to be selected. These fruits are first of all to be denuded of the kernel surrounding

\* द्वितीयक्षणद्वे १२७ पृष्ठे पादटीका द्रष्टव्य ।

the seeds, by means of being rubbed with powdered bricks. The seeds are then to be cut into pieces and boiled with water in an iron cauldron. Thus boiled, the seeds will let out their essence of black colour, which will collect gradually upon the surface of the water. The essence or oil, thus extracted, will have to be taken up carefully. The heating will have to be discontinued when all the essence has been taken up.

The essence of the bhallataka seeds, cut into pieces, may also be extracted by means of the Patala Jantram (see foot-note, page 127, Vol. II.)

( १० ) निर्विषा : \*

निर्विषा मुस्तकाकारा सा हि तृणं विषापहम् ।  
 क्षेत्राल्यादिस्थले सैव जायते हि विशेषतः ॥  
 अविषाऽपविषा सा तु निर्विषी विषहाऽपि च ।  
 विषाभावा विषहन्त्री निर्विषा विषवैरिणी ॥  
 निर्विषा कटुशीतला ब्रणानां रोपिका तथा ।  
 कफवातविषाद्वाणां नितरां शान्तिदायिका ॥  
 शिरोव्यथां निहन्त्याशु ललाटस्पर्शनात् त्रिधा ।  
 शङ्खात् सव्येतरस्माच्च सव्यशङ्खांतकं हि सा ॥†

\* श्यामकाँक्ला इति भाषा ।

† शङ्खौ इति भुवोरन्तोपरि कर्णललाटयोर्मध्ये अस्थिमर्मणी सार्वद्वृले सधोमारके चेदाहते ।

(10) *Nirvisa.*

It is a kind of grass of the appearance of mustaka. It generally grows in such places as landmarks of agricultural fields.

This grass is pungent, cool, and healer of ulcers. It pacifies kapha, vayu, impurities of the blood, and various kinds of poison. It cures head-ache immediately, if it is made to touch the skin of the fore-head by being drawn across it for three times beginning with the side of the left ear to that of the right ear.

( ११ ) अतिविषा ।

विषा त्वतिविषा विश्वा शृङ्गी प्रतिविषारुणा ।

शुद्धकन्दा चोपविषा भङ्गरा घुणवल्लभा ॥

विषा सोषणा कटुस्तिक्का पाचनी दीपनी हरेत् ।

कफपित्तातिसारामविषकासवमिक्रिमीन् ॥

(11) *Ativisha.*

Ativisha is warm, pungent, bitter, digestive, and increaser of hunger. It cures kapha, pittam, diarrhoea, mucus, poison, cough, vomitting, and worms.

( १२ ) अहिफैनम् ।

अहिगुल्मोऽङ्गवं फलं खसफलं च कथ्यते ।

विज्ञायतेऽहिफैनकं निर्यासस्तत्फलस्य हि ॥

अहिफेनं सुतिकं च मदकृद् निद्राकारकम् ।  
 वेदनाक्षेपनाशनं स्पर्शशक्तिविनाशकम् ॥  
 कफश्वासनिवर्हणं ग्राहि पित्तानिलप्रदम् ।  
 धातूनां शोषणं रुक्तं दाहमेहादिवर्धनम् ॥  
 अतिसारे ग्रहणयां च हितं स्वल्पप्रमाणतः ।  
 बहुदिनं न सेव्यं तत् स्वास्थ्यायुःसुखमिच्छता ॥

अहिफेनस्य भेदाः ।

अहिफेनं चतुर्विधं श्वेतं पीतं तथाऽसितम् ।  
 कर्वूरं च विजानीयाच्छेत्तमग्निविवर्धनम् ॥  
 असितं जीवनं हन्ति पीतं स्तम्भकरं परम् ।  
 कर्वूरमहिफेनं हि मलमूत्रादिरेचनम् ॥

(12) *Opium.*

Opium is bitter, intoxicating, inducer of sleep, remover of pain and spasm, destroyer of sensibility, kapha, and asthma, digestive, increaser of hunger, increaser of vayu and pittam, destroyer of the dhatus, depriving the body of its oily substance, and causing inflammation and spermatorrhoea. It is efficacious in diarrhoea, acute as well as chronic, if taken in small quantities. No one who desires to live a healthy, happy, and long life should take opium for a long time.

अहिफेनस्य शोधनम् ।

शृङ्खवेरसैर्भाव्यमहिफेनं त्रिसत्तशः ।

अतोऽयं शुद्धिमायाति योज्यं ततो यथाविधि ॥

*Purification of Opium.*

Opium is purified, if subjected to bhavana with ginger juice for twenty one times.

(१३) जया ।

मातुलानी जया भङ्ग मादिनी विजया तथा ।  
 चपला वीरपत्रा च सिद्धिरिन्द्राशम्नं च सा ।  
 अजेयाऽनन्दसंज्ञा च मादयित्री च हर्षिणी ॥  
 भङ्ग कफहरी तिक्ता \* ग्राहिणी कषाया कटः ।  
 तीक्ष्णोषणा पित्तला लघुर्वाग्मेह + मदवर्ज्जिनी ॥  
 मदनोदीपनी निद्राजननी हृष्ठायिनी ।  
 धनुःस्तम्भं जलत्रासं विसूचीं च मदात्ययम् ।  
 प्रवृत्तिं रजसो बहीं हन्त्यपत्यप्रसूतिकृत् ॥

(13) *Jaya* (Bhang—*Cannabis sativa*.)

Bhang is a destroyer of kapha. It is bitter, increaser of hunger and power of digestion, light, strong, warm, increaser of pittam, spermatorrhoea,

\* मतान्तरे कटुतिक्तकषाया ।

+ मेहस्तले मेघेति पाठान्तरम् ।

intoxication, power of speech, sexual desire, sleep, and laugh. It is efficacious in titanus, hydrophobœa, cholera, and after-effects of alcohol and haemorrhage after child-birth.

जयायाः शोधनम् ।

प्रथमोविधिः ।

वबूलत्वक्कषायेण भङ्गां संस्वेद्य शोषयेत् ।  
गोदुग्धैर्भावनां दत्त्वा शुष्कां सर्वत्र योजयेत् ॥

*Purification of jaya.*

*First process.*

Jaya is purified, if it is boiled with the decoction of the bark of babbula, then dried, and again subjected to bhavana with cow's milk.

द्वितीयोविधिः ।

गोदुग्धे स्वेदिता भङ्गा शोषिता घृतभर्जिता ।  
शुध्यति युज्यते तदा योगेषु सा यथाविधि ॥

*Second process.*

Jaya is purified, if it is boiled with milk, then dried, and fried with clarified butter.

गङ्गा ।

पुष्पं जयाविशेषस्य गज्जेति कथ्यते बुधैः ।  
आधिक्येन जयादोषान् गुणांश्चापि विभर्ति सा ।  
कदाचन न सेव्या सा जीवितसुखमिच्छता ॥

निर्यासः स्वरसोऽपि च गञ्जाया हि विभीषणः ।  
गञ्जारसः ॥ स कथ्यते पिवेत् तं न कदाचन ॥

*Ganja (cannabis Indica.)*

Ganja is a flower of a kind of jaya. It possesses, in excess, all the merits and demerits of jaya. One who wishes to live a happy life should not take (drink or smoke) ganja.

The exudation, juice, or tincture of ganja is commonly called “charas”. It is horribly injurious and should be avoided altogether.

उपविषविकाराणां शान्तिः ।

अहिफेनविषस्य शान्तिः ।

( १ )

बृहत् द्रुद्राम्बुनः पलमात्रं दुग्धेन सेवनात् ।  
अहिफेनविषं शीघ्रं निराकृतं भवेद् ध्रुवम् ॥

*Remedy of Semi-poisons.*

*Opium.*

( १ )

Poison of opium is speedily counteracted, if four tolas of the juice of the larger variety of small ambu (karaballi ? or thorny tanduliyaka ?) is taken with milk.

\* गञ्जारसः—चरस् इति भाषा ।

( २ )

उथसिन्धुस्तथा कृष्णा मज्जा मादनकी तथा ।  
संपिष्ठास्तसनीरेण पीताश्र नागफेनजित् ॥

( २ )

Poison of opium is destroyed, if saindhava (rock-salt), pippali, and kernel of madana fruit are pestled together and drunk with hot water.

( ३ )

टंकनं नीलतुत्थं च घृतयुक्तं च दापयेत् ।  
तद्वान्तिं कारयेत् सद्यो नागफेनविषं जयेत् ॥

( ३ )

Tankana and tutthaka are to be taken with clarified butter. This causes vomiting and thereby removes opium poison from the system.

धुस्तूरबीजस्य शान्तिः ।

( १ )

वृन्ताकफलबीजस्य रसो हि पलमात्रकः ।  
भक्षणाद भुक्तधुस्तूरविषं हन्ति सुनिश्चितम् ॥

*Dhattura Poison.*

( १ )

Poison of dhustura is nullified by drinking four tolas of the juice of seeds of egg fruits (brinjals).

( २ )

कार्पासास्थियुतं पुष्पं जलेनोत्क्राथ्य पानतः ।  
धत्तूरस्य विषं हन्ति तथा लवणसेवनम् ॥

( २ )

Poison of dhatura is destroyed by drinking the decoction of flowers of cotton combined with their stones. Drinking of saline water also serves the same purpose.

( ३ )

गोदुग्धं प्रस्थमेकं च शर्करायाः पलद्वयम् ।  
तत्पानेन विषं याति धस्तूरस्य न संशयः ॥

( ३ )

One prastha (64 tolas) of cow's milk and eight tolas of sugar, drunk together, counter-act the poison of dhastura.

भल्लातकविकारस्य शान्तिः ।

( १ )

स्वरसो मेघनादस्य नवनीतेन संयुतः ।  
भल्लातकभवं शोफं हन्ति लेपेन तत्क्राणात् ॥

*Remedy of Bhallataka poison.*

( १ )

Swelling, due to bhallataka poison, is remedied by the external application of a plaster made of butter and juice of meghanada.

( २ )

दारुसर्षपमुस्तानि नवनीतेन लेपयेत् ।  
भल्लातकविकारोऽयं सद्यो गच्छति निश्चितम् ॥

( २ )

Troubles, due to bhallataka, are removed by the external application of devadaru, sarshapa (mustard seeds), musta, and butter, pestled together.

( ३ )

नवनीतं तिलं दुग्धं पिष्टं खण्डयुतं तथा ।  
लेपनात् शान्तिमायाति भल्लातकविषब्यथा ॥

( ३ )

Swelling and irritation, due to bhallataka poison, is pacified by the external application of butter, sesamus (tila), milk, and khanda gurh (molasses purified and condensed into a tawny-coloured lump).

जयाविषस्य शान्तिः ।

( १ )

शुण्ठी गोदधियुक्ता च पीता भंगाविकारनुत् ।

*Remedy of bhanga poison.*

( १ )

Troubles due to bhanga poison are remedied by drinking shunthi, mixed with cow's curd.

( २ )

पनसपत्रनीरेण जयाविषं प्रशास्यति ।

( २ )

Troubles due to bhang poison are remedied by the juice of the leaves of panasa tree, taken internally.

गुञ्जाविषस्य शान्तिः ।

( १ )

मेघनादरसः पेयः शर्करासंयुतस्ततः ।

क्षीरं पेयं यथासाध्यमुच्चटाविषपीडितैः ॥

*Remedy of gunja poison.*

( १ )

Troubles due to gunja poison are remedied by drinking the juice of meghanada, mixed with sugar, and then drinking milk.

( २ )

मधुखर्जुरमृदिका वृक्षाम्लं चाम्लदाढिमौ ।

परुषैश्चामलैर्युक्ताः सद्योगुञ्जाविकारनुत् ॥

( २ )

The following removes speedily the troubles due to gunja poison :—honey, dates, grapes, tamarind, sour pomegranates, parusha fruits, and amalaki, all rubbed together and taken internally.

करवीरविषशान्तिः ।

दधा वा पयसा वाऽपि माहिषेण समं सिता ।

अथवार्कत्वचा पीता करवीरविषापहा ॥

*Remedy of karabira poison.*

Sugar-candy, mixed with buffalo's milk, or curd, or bark of arka plant, taken internally, removes troubles due to karabira poison.

स्तुहीविषविकारस्य शान्तिः ।

( १ )

शीतवारिथुता पीता सिता वज्रीविषापहा ।  
शीतवायुस्ततः कार्यः शीतच्छायां च संभजेत् ।  
चिञ्चापत्रं जले पिष्टा पिवेद् विषोपशान्तये ॥

*Remedy of snuhi poison.*

( १ )

Troubles due to snuhi poison are removed by drinking cold water, mixed with sugar-candy, and by being treated with cooling fan and resorting to a cool and shady place. Tamarind leaves, pestled with water, should also be taken in such cases.

( २ )

हेमगैरिकयुग्वारि स्तुह्यक्जविकारनुत् ।

( २ )

Water, mixed with red ochre (see page 146, vol. II), removes troubles due to the poisons of snuhi and arka.

अर्कविषविकारस्य शान्तिः ।

( स्तुहीविषविकारशान्तये द्वितीयोविधिर्दृष्ट्यः । )

*Remedy of arka poison.*

(See Remedy of snuhi poison, No. 2.)

जयपालविकारस्य शान्तिः ।

धन्याकं सितया युक्तं पीतं दग्धा समन्वितम् ।  
जयपालभबं दोषं दूरीकरोति निश्चितम् ॥

*Remedy of jayapala poison.*

Dhanya (coriander seeds), pestled with curd and sugar, removes troubles due to croton seeds.

अथ शोधनीयानां

कतिपयद्रव्यानां शोधनविधयः ।

वृद्धदारस्य बीजानि रौद्रमध्ये विशोधयेत् ।  
खल्पसैन्धवयुक्तेन द्रवेण मिलितानि वै ॥  
मयूरस्य कषायेण तानि वा परिशोधयेत् ।  
अथवा दोलिकायन्त्रे दुग्धेन सह पाचनात् ॥

*Purification of some materials requiring purification.*

The seeds of vridha-dara are purified, if dried in the sun, after having been saturated with a solution made of water and a little of rock-salt. They may also be purified, by being boiled with (or subjected to bhavana with) the decoction of apamarga; or by being boiled with milk by means of Dola Jantram.

अपामार्गकषायेण निम्बबीजं ॥ विशोधयेत् ।  
 शिग्रुकार्पासबीजानि अपामार्गस्य बीजकम् ।  
 घर्मेण शोधयेत् सर्वमेतद् द्रव्यान्तरं विना ॥  
 कषायेणेन्द्रवारुण्या राजवृक्षस्य बीजकम् ।  
 मूलकाथैः कुमार्याश्च जैपालबीजशोधनम् ॥  
 समूलोत्तरवारुण्या बीजं शुद्ध्यति कानकम् ॥

Seeds of nimba (nimboo, according to another text) are purified by the decoction of apamarga. Seeds of shigru, karpasa (cotton), and apamarga are purified only by being dried in the sun. Seeds of aragbadha are purified by the decoction of indrabaruni. Seeds of jayapala (croton) by the decoction of the root of kanya, and the seeds of dhustura by the decoction of uttarabaruni including its roots.

तिक्ता कोषातकी दन्ती पटोली चेन्द्रवारुणी ।  
 कटुतुम्बी देवदाली काकतुंडी च शुद्ध्यति ।  
 धात्रीफलरसेनैवं महाकालस्य शोधनम् ॥  
 करञ्जयुग्मयोबीजं भृङ्गराजेन शोधयेत् ॥

Seeds of katuki, koshataki, danti, patola, indrabaruni, katu-tumbi, deva-dali, white gunja, and maha-kala—all of these are purified by the juice of amalaki. Seeds of karanja and karanji (visa-karanja) are purified by the juice of bhringa-raja.

\* निम्बुबीजमिति पाठान्तरम् ।

युज्ञादिसर्वबीजानां नरमूत्रैः पटुं विना ।  
नारिकेलाम्बुना शोध्यं विलवं भल्लातकं च वै ॥

Gunja and the other seeds are purified by human urine, not mixed with salt. Seeds of vilba and bhal-lataka are purified by cocoa-nut water.

गुग्गुलुशोधनम् ।

( १ )

काथे हि दशमूलस्य चोषणे प्रक्षिप्य गुग्गुलुम् ।  
आलोड्य ब्रह्मपूतं तं चण्डातपविशोषितम् ।  
घृताकं पिण्डितं कुर्याद् यत्वात् तत्य विशुद्धये ॥

( २ )

अमृतायाः कषायेण शोधयेद् वापि गुग्गुलुम् ।  
दोलायन्त्रे यथाविधि शोषयेदातपे ततः ॥

( ३ )

दुग्धे वा त्रिफलाकाथे दोलायन्त्रविपाच्चितः ।  
वाससा गालितो ग्राह्यः सर्वकर्मसु गुग्गुलुः ॥

### *Purification of Guggulu.*

Guggulu is purified, if it is dissolved with a decoction of dasha-mula, and then filtered through a piece of cloth, and dried in the intense heat of the sun.

( २ )

Guggulu may also be purified, if boiled with the decoction of guruchi by Dola Jantram, and then dried in the sun.

( ३ )

Guggulu may also be purified by being boiled with milk or decoction of triphala by the Dola Jantram.

जलौकाशोधनम् ।

चिरंतनीं जलौकां हि ताम्रपात्रे सुरक्षयेत् ।  
 चतुर्मासं निशाचूर्णं जलाष्टकपले क्षिपेत् ॥  
 तस्मिन् क्षिपेत् जलौकां तां स्वयं लालां परित्यजेत् ।  
 त्यक्तलाला जलौका हि प्रयोज्या रक्तमोद्धणे ॥  
 कपिला रोमपृष्ठा च रक्तरेखा च दुर्वला ।  
 वर्जनीया विशेषेण भिषजा कीर्त्तिमिच्छता ॥

*Purification of Leeches.*

A leech, which is sufficiently old, is to be kept in a copper pot. It is to be immersed in 32 tolas of water, mixed with one fourth of a tola of powdered haridra (turmeric). Thus treated, it will give out its saliva. Purified in this way, the leech may be applied for the purpose of blood-sucking.

A leech of the following description is to be avoided :—

(1) A leech which has got furs on its body, or (2) one which is of tawny colour ; or (3) one which has got red lines on its body ; or (4) one which is weak.

नवमोऽध्यायः ।

अथ तैलपातनम् ।

सामान्येन सर्वबीजानां तैलपातनविधिः ।

( १ )

अपक ॥ भानुपत्राणां रसमादाय भावयेत् ।  
यत्किञ्चिद् बीजचूर्णं च ज्ञातं वा न ज्ञातं च वा ॥  
वस्त्रवद्धं ततस्तंच स्थापयेत् स्थालिकोपरि ।  
आतपे मुच्यते तैलमन्यथाऽसाध्यमेव च ॥

## CHAPTER IX.

### EXTRACTION OF OIL FROM SEEDS OF ANY KIND.

( 1 )

Any kind of seed, known or unknown, is to be powdered very finely, and subjected to bhavana with the juice of green † leaves of arka. The seed is then to be kept, tightly confined in a piece of cloth, and placed upon a pot in the sun. Oil will come out of the bundle containing the seed.

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\* सुपक इति पाठान्तरम् ।

† Ripe, according to another text,

( २ )

पर्याप्तमात्रबीजानां तैलमाशु विपात्यते ।  
तैलकारस्य घूर्णिना यथा सर्वैर्विद्यश्यते ॥

( २ )

Oil can be extracted from oil-seeds, of sufficient quantity, by means of the well-known machine used by oilmen.

( ३ )

यत्किञ्चिद्वीजचूर्णाणि वस्त्रपूतानि कारयेत् ।  
समूलोत्तरवारुणीकाथेन तानि मर्दयेत् ॥  
तेनालिसँ कांस्यपात्रं धारयेदातपे खरे ।  
सुतसँ वस्त्रपूतं च पातितं तैलमाहरेत् ॥

( ३ )

Seeds of any kind are to be powdered very fine, and sifted through a piece of cloth. They are then to be rubbed with the decoction of uttarabaruni with its roots, and made into a paste with which is to be smeared the internal surface of a bell-metal pot, kept in the intense heat of the sun. Thus heated, the paste will yield oil which is to be filtered by means of a piece of cloth.

( ४ )

सर्वबीजस्थिमांसानां शुष्काणां पेषणान्मुद्दुः ।  
पातयेद् यत्तस्तैलं यन्त्रेन पातालाख्यके ॥

\* द्वितीयखण्डे १२७ पृष्ठे पादटीका द्रष्टव्या ।

( ४ )

Oil can be extracted by means of the Patala Jantram from all sorts of seeds, bones, and flesh, dried and pounded over and over again.\*

( ५ )

अंकोल्लबीजसंभूतं चूर्णं संमर्द्ध्य काञ्जिकैः ।

एकरात्रोषितं तत् तु पिण्डीकृत्य ततः परम् ॥

स्वेदयेत् कम्दुके यन्त्रे घटिकाद्वितयं ततः ।

तां च पिण्डीं दृढे वस्त्रे बद्धा निस्पीड्य काष्ठतः ॥

अधःपात्रस्थितं तैलं समाहृत्य नियोजयेत् ।

एवं कन्दुकयन्त्रेन + सर्वतैलान्युपाहरेत् ॥

( ५ )

Seeds of ankolla, pestled with kanji, are to be kept one night, and then made into a lump which is to be heated by means of the kanduka Jantram or Swedani Jantram (see page 251, vol. I), for two hours. It is then to be confined tightly in a piece of tough cloth, and pressed by means of a strong piece of wood resulting in the extraction of oil.

Oil can thus be extracted from all sorts of seed.

\* See foot-note, page 127, vol. II.

† प्रथमखण्डे २५१ पृष्ठं द्रष्टव्यम् ।

विशेषेण वीजानां तैलप्राप्तनिधिः ।

मूलान्युक्तरवारुण्या जर्जरीकृत्य काञ्जिके ।  
 क्षिपेदंकोङ्गबीजानां पेषितं तत्र यद्यतः ॥  
 तेनालिसं कांस्यपात्रं धारयेदातपे खरे ।  
 सुतसं वस्त्रपूतं च स्त्यानं तैलं समाहरेत् ॥

*Extraction of oil from seeds, in particular.*

Root of uttarabaruni is to be pestled with kanji with which is to be mixed seeds of ankolla, pestled very fine. The whole thing is to be mixed well. The inner surface of a bell-metal pot is to be smeared with this paste and kept in the sun. The thick oil, which will come out of the paste, is to be filtered by means of a fine piece of cloth,

संपेष्योक्तरवारुण्याः पेटकार्या दलान्यथ ।  
 काञ्जिकेन ततस्तेन कल्केन परिमिद्येत् ॥  
 रजश्चाङ्गोङ्गबीजानां तद् बछू। विरलाम्बरे ।  
 प्रविलम्ब्यातपे तीव्रे तस्याधश्वषकं न्यसेत् ।  
 तस्मिन् निपतितं तैलमादेयं श्वित्रनाशनम् ॥

Leaves of uttara-baruni and petakari are to be rubbed with kanji and made into a paste. Powdered seeds of ankolla are to be rubbed with this paste, which is then to be confined in a piece of thin cloth and kept hanging in the sun over a pot meant to con-

tain the oil which is to fall, drop by drop, upon it. This oil cures Leucoderma.

यथा धूस्तुरजं तैलं काथाद् घर्मे समुद्धरेत् ।  
 तथा सर्वत्र तैलानि संग्राह्यान्यौषधान्तरैः ॥  
 अङ्कोटस्यापि तैलं स्यात् काकतुणज्या समूलया ।  
 वाकुच्या देवदालयाश्च ककोटीमूलतो भवेत् ॥  
 अपामार्गकषायेण तैलं स्याद् विषतिन्दुजम् ।  
 मूलकाथैः कुमार्यस्तु तैलं जैपालजं भवेत् ॥

Oil can be extracted from the ankota seeds by being rubbed with the decoction of gunja plant with its roots, in the same way as from the seeds of dhus-tura, rubbed with the decoction of uttara-burani. Oil can similarly be extracted from the seeds of bakuchi and devadali, separately, by being rubbed with the decoction of karkoti; from the seeds of kuchila, being rubbed with the decoction of apamarga; from seeds of jayapala (croton), being rubbed with the decoction of the roots of kanya.

रक्तापामार्गसंकाथैर्वाकुचीतैलमाहरेत् ।  
 क्वाथेन चेन्द्रवासुरायास्तैलमारग्वधस्य च ॥

In the same way, oil can be extracted from bakuchi seeds, rubbed with the decoction of red apamarga; and from aragbadha seeds, rubbed with the decoction of indrabaruni;

बीजानि कटुतुम्ब्याश्च गोमयेन विलोड़येत् ।  
 शुष्कं धान्यतुषैः साञ्छं कुट्टयेत् तदुदूखले ॥  
 निस्तुषं तं विचूरण्याऽथ भृङ्गराजरसः सह ।  
 मर्दयित्वातपे तैलं यहीयात् पीड़ने ततः ॥

Seeds of katu-tumbi are to be rolled with cow-dung. When dried, they are to be husked along with dry husks of paddy in a mortar. The seeds are next to be separated from the husks, and pestled with the juice of bhringa-raja. The paste, thus prepared, is next to be heated in the sun, and pressed, confined in a piece of cloth, so that oil comes out of it.

कृष्णायाः काकतुण्ड्याश्च बीजानि परिचूर्णयेत् ।  
 कान्तपाषाणचूर्णेण तच्चूर्णं मेलयेत् ततः ॥  
 धान्यराशौ ततः स्थाप्यमुद्धृते तैलमाहरेत् ।  
 अपामार्गस्य संकाथैरातपे हि यथाविधि ॥

Seeds of black as well as of white gunjas are to be powdered. This powder is to be commingled with powdered load stone, the whole thing being kept inside a heap of paddy for sometime. It is then to be rubbed with the decoction of apamarga, and oil to be extracted from it in the afore-said way.

धात्रीफलरसैर्भाव्यं चूर्णं पाषाणबीजजम् ।  
 दिनैकं च ततो यत्तात् तैलं ग्राख्यं च घूर्णितः ॥

Powdered seeds of pashana (?) are to be subjected to bhavana with the juice of amalaki for one day, and then oil is to be extracted from them by means of the ghurni machine.

गुज्जाकरञ्चूर्णाणि नरमूत्रेण भावयेत् ।  
सप्तवारं ततो घर्मे लेपयेत् कांस्यभाजनम् ।  
उद्धृत्य धारयेद् घर्मे तैलं पतति पीडनात् ॥

Powdered gunja as well as karanja seeds are to be subjected to bhavana with human urine for seven times. The inner surface of a bell-metal pot is next to be smeared with the paste, thus prepared, and heated for sometime in the sun. The paste is next to be confined in a piece of cloth, heated in the sun, and pressed so that oil comes out of it.

वर्षमानारणालेन पिष्टा चूर्णं विभावयेत् ।  
ज्योतिष्मत्युत्थबीजानामातपे तैलमाहरेत् ॥

Powdered seeds of jyotismati are to be pestled with aranala of one year's standing, and subjected to bhavana with the same liquid. The paste is next to be heated in the sun, and oil extracted, as before.

पुत्रंजीवस्य बीजानां चूर्णमगस्तिबीजजम् ।  
आम्रातवत् प्रकर्त्तव्यं पात्यं तैलं पृथक् पृथक् ॥

नारिकेलाम्बुना भाव्यं विष्णवोजस्य चूर्णकम् ।  
दिनैकं तैलयन्त्रेण तैलमाकृष्य योजयेत् ॥

Powdered seeds of putranjiba as well as of agasti are to be made into a lump of the shape of amrataka or hog plum (by being rubbed with water or decoction of uttara-baruni), and then pressed, as before, for extraction of oil. Powdered seeds of vilba are to be subjected to bhavana with cocoanut water for one day, before oil is extracted from them by means of the oil-machine (ghurni).

निस्तुयं कोलबोजानां मुखं किञ्चिद् विघर्षयेत् ।  
लेपयेत् कांस्यपात्रे तान् पिष्टचनकलेपनैः ॥  
तन्मुखे चूर्णटंकणं किञ्चित् किञ्चित् प्रलेपयेत् ।  
धारयेदातपे तीव्रे मुखात् तैलं समाहरेत् ॥

Mouths of ankola seeds, previously separated from their husks, are to be rubbed a little. Each of them is then to be kept on a bell-metal pot, and smeared all round with chanaka grams made into a paste. The mouth of each of these is to be smeared with a paste made of powdered borax (tankana). All of these seeds are then to be placed in the strong heat of the sun. Oil, coming out of the mouths of these seeds, is then to be collected.

शमीचूर्णं समं पिष्टा छिद्रभारडे निवेशयेत् ।  
छिद्राधः स्थापयेद् भारडं छिद्रे केशं च दापयेत् ॥

जलेन सेचयेद् द्रव्यं छिद्राधो प्राहयेत्त तम् ।  
तन्मध्ये धृतकेशस्य क्षिपेदूच्छु पुटं शनैः ।  
तत् क्षणाद् द्रवरूपं च केशतैलं वहिर्भवेत् ॥

Powdered seeds of shami are to be pestled very finely and kept inside a pot having a hole at its bottom. This pot is to be put upon another pot. The hole in the upper pot is to be stopped by means of hair. Some water is to be poured into the upper pot. (The lower part and that part of the upper pot which contains the hair are to be kept in a pit made in the ground). A fire is to be made covering the upper pot, with the result that water will fall, first of all, into the lower pot, followed by oil ; (This is only a kind of Patala Jantram).

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## दशमोऽध्यायः ।

### अथ सन्धानवगः ।

सन्धानं त्रिविधं ज्ञेयं प्रथमं मदिरान्वितम् ।  
 द्वितीयं मदिराहीनं भेषजं च निगद्यते ॥  
 चिरस्थायि भवेद् द्वयं कालेन गुणवत्तरम् ।  
 अमदिरं तृतीयं तत् खल्पकाले विनश्यति ।  
 तदपि युज्यते गदे गौणतः पीयतेऽपि च ॥

### CHAPTER X.

Sandhanas are of three different kinds, viz. (1) alcoholic, (2) non-alcoholic but fermented drugs, such as asavas, aristas, etc., and (3) non-alcoholic but fermented, drinks, sometimes used as ingredients of medicines (such as kanji).

Of these, the first two are practically everlasting, and increase in quality every day; whereas the third does not last for a very long time.

( १ ) मदिरं सन्धानम् ( मद्यम् ) ।

मद्यं बहुविधं प्रोक्तं तत्त्वाम मदिरा सुरा ।  
 इरा च कारणं तत्त्वं महानन्दा च माणिका ॥

अमृता माधवी मत्ता मदनी मोदिनी मधु ।  
 दित्यपत्यप्रिया चैव कामिनी कपिशी तथा ॥  
 सुरा बहुविधा ज्ञेया तत्राष्ट्र प्रथिता भुवि ।  
 गौड़ी माधवी तथा पैष्ठी कादम्बरी च वारुणी ।  
 माधूकी चैव मैरेयी माद्दीकेति सुराष्ट्रकम् ॥  
 पकापकविभेदेन सुरा हि द्विविधा मता ।  
 तेजोयन्त्रादि \* योगेन पका संजायते हि सा ॥

(1) *Alcoholic Liquors (wine).*

Wine is of various kinds. Of these, the following eight are well-known :—(a) gouri, (b) madhvi, (c) paisti, (d) kadamvari (e) varuni, (f) madhuki (g) maireyi and (h) mardi.

Wine may be undistilled as well as distilled. It may be distilled by means of the Tejo-Jantram, Nadika Jantram, Baruni Jantram, and Baka Jantram (see pages 280-85, vol. I).

(क) गौड़ी ।

धातकीयुद्धमुख्या या गौड़ी सा मदिरोच्यते ।  
 तीक्ष्णोषणा मधुरा गौड़ी वातम्बी वलपित्तकृत् ।  
 कान्तितृसिकरी पथ्या वहिकामप्रदीपनी ॥

\* प्रथमखण्डे २८०—८५ पृष्ठानि द्रष्टव्यानि ।

(a) *Gouri.*

Wine, named gouri (from gurh—molasses), is prepared mainly from dhataki flower and gurh. It is acrid, warm, sweet, pacifier of vayu; increaser of strength, pittam, and brightness of complexion. It is agreeable to taste, nutritious, and increaser of power of digestion and sexual desire.

## (ख) माध्वी ।

मध्वादिविहिता या तु माध्वी सा मदिरोच्यते ।  
नात्युषणा मधुरा माध्वी पित्तानिलनिसूदनी ।  
कामलापाण्डुगुल्मार्शःप्रमेहमीहघातिनी ॥

(b) *Madhvi.*

It is made of honey, and other ingredients. It is not very warm. It is sweet, and destroyer of pittam, vayu, jaundice, anemia, gulma, piles, gonorrhœa, and enlargement of the spleen.

## (ग) पैष्टी ।

कृता बहुविधैर्धान्यैः पैष्टीति मदिरोच्यते ।  
कट्टम्ला कफवातहृत् तीक्षणा गौडीसमा च सा ॥

(c) *Paisti.*

It is made of paddy of various kinds. It is pungent, sour, destroyer of vayu and kapha, and acrid like gouri.

(द) कादम्बरी ।

कादम्बरीति विस्त्रयाता नानाद्रव्यकदम्बजा ।०  
कादम्बरी मधुरा च श्रमपित्तप्रणाशनी ॥

(d) *Kadamvari.*

Kadambari is prepared from kadamba fruits and many other materials. It is sweet and remover of fatigue and pittam.

(४) वारुणी ।

रसः खर्जुरतालयोः संहितो वारुणी मतः ।  
तद्वरससंधिता सुरा वारुणी चापि कथ्यते ॥

(e) *Varuni.*

It is the fermented juice of date tree and palm tree. Liquor, prepared from other materials with the help of the said juice, is also called varuni.

(च) माधूकी ।

मधूकपुष्पजाता या माधूकी सा निगद्यते ।  
माधूकी मादिनी बलया पुष्टिकृत् कामवर्द्धिनी ॥

(f) *Madhuki.*

It is made of madhuka (mahua) flowers, and is intoxicating, strengthening, nutritious, and increaser of sexual desire.

\* कदम्ब इति कदम्बफलं देवदालीलता वा । कदम्बार्थं  
बहुद्रव्यानां ( पित्तनाशकानामत्र ) समुदाय इत्यपि ग्राह्यः ।

(छ) मैरेयी ।

मालूरमूलकं चैव बद्री शर्करा तथा ।

एषामेकत्र सन्धानान् मैरेयी मदिरा मता ॥

मैरेयी वातहृद बल्या ज्वरघी वहिदीपनी ॥

(g) *Maireyi.*

It is a liquor prepared by the fermentation of vilba roots, plum fruits, and sugar. It pacifies vayu, cures fever, and increases strength and hunger.

(ज) मार्द्वीकम् ।

मृद्वीकाभिः कृतं मद्यं मार्द्वीकमिति कथ्यते ।

मार्द्वीकमविदाहित्वान् मधुरान्वयतस्तथा ॥

रक्तपित्तेऽपि सततं बुधैर्न प्रतिषिद्ध्यते ।

लघुपाकि सरं तच्च विषमज्वरंशोषहृत् ॥

(h) *Mardvika.*

It is wine prepared from grapes. It does not give rise to heat, acidity, and indigestion in the system. It is sweet.

There is no objection, therefore, to its being prescribed even in cases of hemorrhage (which is due to an excess of pittam or heat and vayu causing contraction of the nerves, arteries, etc.) It is light in digestion, laxative, and efficacious in visama jwara (Malaria, kala-zar, etc).

सुरामण्डादि ।

सुरामण्डः प्रसन्ना स्यात् ततः कदम्बजा घना ।  
तदधो जगलो ज्ञेयो मेदको जगलाद् घनः ।  
वक्सो \* हृतसारः स्यात् सुराबीजं च किंवकम् ॥

*Different parts of undistilled wine.*

The upper part of the scum of wine is called prasanna. Kadamvaja is denser than that. That part of the wine which is denser than kadamvaja is called jagala. Medaka is denser than jagala. In other words, Medaka is the densest part of the wine before it is filtered or distilled. The wine from which all its essence has been taken out (by distillation) is called bakkasa, or the seed of wine, or kinvaka.

सामान्येन मधानां स्वभावाः ।

मध्यं नवमभिष्यन्दि त्रिदोषजननं सरम् ।  
अहृद्यं बृंहणं दाहि दुर्गन्धं विशदं गुरु ॥  
जीर्णं तदेव रोचिष्णु क्रिमिश्लेष्मानिलापहम् ।  
हृद्यं सुगन्धिं गुणवल् लघु स्रोतोविशेषधनम् ॥  
विविधगुणमणिडतमपि मध्यं परित्यजेत् ।  
दोषास्तस्यातिशेरते गुणान् सर्वान् न सन्देहः ॥  
भेषजार्थे सुरापानं क्वचित् क्वचिद् विधीयते ।  
ग्रहणदानपानेषु साऽन्यथा नैव युज्यते ॥

\* वालर इति भाषा ।

*Properties of wine in general.*

New wine causes the discharge of phlegm (through the nostrils, the eyes, etc.). It increases the three doshas and is laxative. It is harmful to the heart, nutritious, and causing inflammation in the system.

It has bad smell, is clear, and heavy. Old wine is increaser of appetite ; and destroyer of worms, phlegm, and vayu. It is agreeable to taste and yields a good odour. It is wholesome, light in digestion, and purifier of the internal passages.

In spite of the various merits attending wine, it is to be avoided altogether. Its demerits predominate over its merits. Wine is sometimes prescribed by way of medicine, but otherwise, it is unworthy of drinking, receiving from others, and being given to others.

## (2) अमदिरं सन्धानम् ।

सन्धानं मदिराहीनं वहुविधं प्रचक्षते ।

तेषां हि द्वादशं वहुविदितं धरणीतले ॥

आसवारिष्टसीधवः शुक्तधान्याम्लकाञ्जिकम् ।

गुडशुक्तं तथा चुक्रं तुषाम्बु यवनिर्मितम् ।

सौवीरमारनालं च शिरडाकी भेषजोचितम् ॥

(2) *Non-alcoholic but fermented Liquids.*

Fermented but non-alcoholic liquids are of various kinds. Of these, the following thirteen are well-known :—(a) asava, (b) arista, (c) sidhu, (d) shukta,

(e) gura-shukta, (f) chukra, (g) tushamboo, (h) dhanyamla, (i) kanji, (j) sauvira, (k) aranala, and (l) shindaki.

All of these are used as ingredients of medicine.

(क) आसव स्तथा (ज) अरिष्टः ।

द्रवेषु चिरकालस्थं द्रव्यं यत् संहितं भवेत् ।

आसवारिष्टभेदैस्तत् प्रोच्यते भेषजोचितम् ॥

यदपकौषधाम्बुभ्यां सुसंहितं स आसवः ।

अरिष्टः काथसंहितं तयोर्मानं पलोन्मितम् ॥

(a) *Asava* and (b) *Arista*.

*Asava* is a fermented liquid prepared from several drugs immersed for a sufficiently long time in water, which does not require any heating and boiling.

*Arista* is also a fermented liquid, prepared from several drugs, immersed, for a sufficiently long time, in decoction of prescribed drugs.

The dose of both of these is one pala or four tolas (to be taken twice a day).

(The difference between *arista* and *asava* is that the former is to be fermented in a decoction of drugs prescribed differently in different cases, whereas the latter is a fermentation in cold water of drugs, prescribed differently in different cases. Both *asavas* and *aristas* form a class of important medicines.)

बरिष्टेषु द्रव्याणां परिमाणम् ।  
 अनुकमिल्यरिष्टेषु द्रवाद् द्रोणं तुलागुडम् ॥  
 खौद्रं क्षिपेद् गुडादद्धं प्रक्षेप्यं दशमांशिकम् ॥

*Proportion of materials in an Arista.*

Where there is no specific mention of the quantities of the materials to be used in a certain arista, they are to be taken as follows :—The quantity of the decoction (of the materials to be mentioned in each case) is one drona (16 prasthas or  $16 \times 64$  tolas) ; that of gurh is four hundred tolas (or  $6\frac{1}{2}$  prasthas) ; and of honey 200 tolas (or  $3\frac{1}{2}$  prasthas) ; and that of the materials to be kept immersed is one tenth of the gurh (molasses).

(ग) सोधुः ।

स्थापयेद् मृदघटे नवे कञ्चिन् मिष्ठद्रवं सुधीः ।  
 मुखं तस्य पिधातव्यं शरावेण प्रयत्नतः ॥  
 स्थापयेदातपे तत् तु यावत् तन् नैति संहितिम् ।  
 अपसार्य शरावं तु द्रवोपर्युत्थितं मलं ॥  
 रोट्टेन्ट्सपक्तरा पुनर्मुखं च रोधयेत् ।  
 अनेन संहितं सम्यक् सीधिति कथ्यते जनैः ॥  
 सीधु हि द्विविधो ज्ञेयः पक्षश्वापक एव च ।  
 पक्षमिष्ठद्रवाजातः सीधुर्पक्षो हि कथ्यते ।  
 अपकमधुरद्रवाज् जातश्च शीत एव हि ॥

(c) *Sidhu (a kind of vinegar).*

Keep some sweet liquid in a new earthen vessel, covered with an earthen basin. Place the vessel in the sun every day, till the liquid gets fermented. Take cut, every now and then, the dirty scum collected on the surface of the liquid, and then close the mouth of the vessel, as before. When sufficiently fermented in this way, (i.e, when there will be no more scum gathered on the surface of the liquid), the liquid will be called Sidhu.

Sidhu is of two kinds, viz. boiled and unboiled. That which is prepared by fermenting a boiled liquid of sweet taste is called "pakva" or boiled sidhu ; and that which is prepared from unboiled liquid of sweet taste is called "apakva" or unboiled sidhu.

(घ) शुक्तम् । \*

( २४ खण्डे २६ पृष्ठे पादटीका द्रष्टव्या ) ।

(d) *Suktam\**

(See foot note, page 28, vol. II.)

(ङ) धान्याम्लम् ( तुषाम्लम् ) ।

प्रस्थं षष्ठिकधान्यस्य नीरप्रस्थद्रये द्विपेत् ।  
आधारभाण्डं संरुध्य भूमेर्गर्भे निधापयेत् ॥  
पद्मान्ते तत् समुद्धृत्य वस्त्रपूतं च कारयेत् ।  
धान्याम्लं कथितं तत् तु तुषाम्लं च तदेव हि ॥

धान्याम्लं शालिचूर्णच्च कोद्रवादेश कारयेत् ।

धान्याम्लं धान्ययोनित्वात् प्रीणनं लघु दीपनम् ।

अरुचौ वातरोगेषु हितमास्थापने च तत् ॥

(e) *Dhanyamla.*

One prastha (64 tolas) of shasti paddy is to be thrown into two prasthas of water, contained in an earthen (or made of chinese clay) vessel, which is to be kept underground with its mouth closed. This is to be taken out after a fortnight, and the liquid is to be filtered. This is called dhanyamla or tushamla.

Dhanyamla may also be prepared from powders of such paddies as shali and kodrava. It is agreeable to taste, light for digestion, and increaser of hunger. It is beneficial in aversion for food, and diseases due to vayu, and commendable for the purpose of being used for douche.

(c) काञ्जिकम् ।

तुलामितं षष्ठिकतरडुलस्य

प्रपृश्य चान्नं विधिवद् विधाय ।

द्रोणेऽम्भसि द्वितमथ प्रयत्नात्

सप्ताहकालं पिहितं हि रक्षेत् ॥

ततस्तु कल्कं सकलं निरस्येत्

तत् काञ्जि तीक्ष्णं लघु पाचनं च ।

दाहज्वरन्नं कफवातनाशि

रेको च रुच्यं तथा दीपनं हि ॥

विवन्धशूलानलनाशहृत् तत्  
 कुल्माष ॥ योगादपि काञ्जि कार्यम् ।  
 अनन्तरोक्तविधिपूर्वकं हि  
 जालिः + प्रदेयः खलु काञ्जयभावे ॥

(f) *Kanji.*

One tula (400 tolas) in weight of the rice of shasti paddy, duly prepared, is to be immersed in one drona (16 prasthas or  $16 \times 64$  tolas) of water, for seven days, in a vessel closed all the while. The water is then to be filtered. It is called kanji.

It is strong ; light ; digestive ; curer of fever with inflammation, and excess of kapha and vayu ; laxative, increaser of liking for food and of appetite ; and curer of constipation, colic, and loss of power to digest.

Kanji may also be prepared in the same way from boiled wheat or chanaka, etc.

Jali (water turned sour by boiled rice being immersed in it constantly for a few days) may be used, in lieu of kanji, where the latter is not available.

(छ) गुडशुक्तम् ।

कन्दमूलफलादिभिः सस्नेहलवणाम्बुभिः ।  
 गुडं यत्राभिषूयन्ते गुडशुक्तं तदेव हि ।  
 एवमेवेकुशुक्तं स्याद् मृद्धीकासंभवं तथा ॥

\* कुल्माष इति अर्द्धस्विन्ना गोधूमाध्वनकादयः ।

† जालिरिति नेयतांश्चमञ्जनजनितमस्तीः सुतं जलम् । आमानीति भाषा ।

(g) *Gura-shuktam.*

It is a fermented liquid prepared from water, gurh (molasses), certain tubers, roots, fruits, oil, salt, etc.

Such drinks may also be prepared from the juice of sugar-cane, as well as from the juice of grapes, substituted for gurh.

## (j) चुक्रम् ।

विनष्टमस्ततां यातं मद्यं वा मधुरद्रवः ।

विनष्टः सन्धितो यस्तु तच्चुक्रमभिधीयते ॥

(h) *Chukram.*

Wine, spoiled and grown sour, as well as sweet liquid, fermented, is called chukram.

## (क) तुषाम्बु च (अ) सौवीरं च ।

तुषाम्बु संहितं ज्ञेयमामैर्विदलितैयवैः ।

यवैस्तु निस्तुषैः पक्षैः सौवीरं संहितं भवेत् ॥

(i) *Tushambu* and (j) *Sauvira.*

Tushambu is a liquid, prepared from powdered, unhusked, and unboiled barley, fermented with water only, whereas sauvira is a liquid, prepared from powdered, husked, and boiled barley, fermented with water only.

(ट) आरनालम् ।

आरनालं तु गोधुमैरामैः स्यान्निस्तुषीकृतैः ।  
पक्वैर्वा संहितैस्तत्तु सौवीरसदृशं गुणैः ॥

(क) *Aranala.*

It is a liquid, prepared from powdered and husked wheat, boiled or unboiled, and fermented with water only.

It has the same properties as sauvira.

(ठ) शिंडाकी ।

शिंडाकी संहिता ज्येया मूलकैः सर्षपादिभिः ॥

(l) *Shindaki.*

It is water fermented with mulaka (radish), mustard seeds, etc.

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## एकादशोऽध्यायः ।

### अथ परिभाषा ।

शुल्वनागः ।

माक्षिकेण हतं ताम्रं दशवारं समुत्थितम् ।  
तदुवद् विशुद्धनागं हि द्वितयं तच्चतुष्पलम् ॥  
नीलाञ्जनहतं भूयः सप्तवारं समुत्थितम् ।  
इति संशुद्धमेतद्धि शुल्वनागं प्रकीर्त्यथते ॥  
साधितस्तेन सूतेन्द्रो वदने विधृतो नृणाम् ।  
निहन्ति मासमात्रेण मेहब्यूहं विशेषतः ॥  
पथ्याशनस्य वर्षेण पलितं बलिभिः सह ।  
गृध्रष्टिर्लसत्पुष्टिः सर्वारोग्यसमन्वितः ॥

### CHAPTER XI.

*Paribhasa (Definitions.)*

*sulva-naga.*

Copper is to be killed with makshika (pyrites) for ten times and revived each time. Pure lead is also to be similarly treated. Two palas each of these two metals are to be taken and combined. This amalgam is to be killed with nilanjanam for seven times

and revived each time. The amalgam, thus purified, is called, "Sulva-naga" (Copper-lead).

Mercury consolidated with this amalgam, and kept in the mouth, cures all sorts of spermatorrhœa and gonorrhœa in one month only. Keeping it in the mouth for one year, with the observance of salutary diet, makes a man free from senile decay and all sorts of diseases. It improves especially eye-sight and helps all-round development of the body.

### वरलोहम् ।

ताम्रं तौचणसमायुक्तं द्रुतं निक्षिप्य भूरिशः ।  
सगन्धिलकुचद्रावे निर्गतं वरलोहकम् ॥

### *Vara-loha.*

Copper, combined with an equal quantity of tikshna (steel), is to be melted and immersed, for several times, in a solution of sulphur and the sour juice of a lakucha fruit. The amalgam turns, by this process, into an excellent metal.

घोषाकृष्टताम्रम् ।  
स्वल्पतालयुतं कांस्यं वंकनालेन ताडितम् ।  
मुक्तरङ्गं हि तत्ताम्रं घोषाकृष्टमुदाहृतम् ॥

### *Copper extracted from Bell-metal.*

Bell-metal, mixed with a little haritala, is to be subjected to fire blown by a blow pipe. The tin will, in this way, be burnt away, leaving only the

copper. This copper is ghosa-krista (i. e. extracted from bell-metal).

वरनागम् ।

तीक्ष्णं नीलाञ्जनोपेतं ध्रातं हि बहुशो दृढम् ।  
मृदु कृष्णं द्रुतद्रावं वरनागं तदुच्यते ॥

*Bara-naga (Excellent Lead).*

Tikshna iron, mixed with nilanjana (see page 202, vol. II), and heated for several times, becomes soft, black, and quickly liquefiable. This is called bara-naga (excellent lead).

पतङ्गिरागश्चुल्लकरागश्च ।

पतङ्गिकल्कतो \* जाता लोहे तारत्वहेमता ।  
दिनानि कतिचित् स्थित्वा यातासौ चुम्भका मता ॥  
रजिताद्धि चिरं लोहाद् ध्राताद् वा चिरकालतः ।  
विनिर्यासः † स निर्दिष्टः पतङ्गिरागसंज्ञकः ॥

*Patangi-raga and chullaka-raga.*

The colour of gold which base metals may assume for a short time, by a mercurial preparation being thrown into it, when melted, is called “chullaka”

\* पतङ्गिकल्कः इति पतङ्गः पारदः अस्यास्तीति पतङ्गी तस्य कल्कः साधितद्रव्यम् ।

† विनिर्यास इति बहिरागमः ।

colour, whereas the colour of a base metal, permanently transformed into gold or silver is called patangi-raga.

आवापः ।

द्रुते द्रव्यान्तरक्षेपो लोहादौ क्रियते हि यः ।  
स आवापः प्रतीवापस्तदेवाच्छादनं मतम् ॥

*Abapa.*

The act of throwing some thing into a liquefied metal is called “abapa”, “pratibapa”, or “achchadana”.

अभिषेकश्च निर्वापश्च ।

द्रुते वहस्थिते लोहे विरस्याष्टनिमेषकम् ।  
सलिलस्य परिक्षेपः सोऽभिषेक इति स्मृतः ।  
तपस्याप्सु विनिक्षेपो निर्वापः स्नपनं च तत् ॥

*Abhisheka and nirbapa.*

Abhisheka is the act of sprinkling water upon liquefied metal, a few seconds after it is got down from the furnace.

Nirbapa or snapanam is the act of immersing hot metal immediately from fire into water.

शुद्धावर्त्तीजावर्ती ।  
यदा हुताशो दीपाच्चिं शुद्धोत्थानसमन्वितः ।  
शुद्धावर्त्तस्तदा लोहः स कालः सत्त्वनिर्गमे ॥

द्राव्यद्रव्यनिभा ज्वाला हश्यते धमने यदा ।  
 द्रावस्योन्मुखता यत्र बीजावर्त्तः स लोहकः ॥  
 प्रतिवापादिकं कार्यं शुद्धावर्त्ते द्रुते लोहे ॥

*Suddhavarta and Vijavarta.*

Suddhavarta is that condition of a metal which is so heated by a strong fire that the latter emits white flames. That is the time of essence coming out of the metal.

Vijavarta is that condition of a metal, which, while heated with the object of being melted, makes the fire emit flames of the colour of the metal itself, which shows a heaving tendency at the time.

It is only on a melted and suddhavarta metal that an ābapā is to be resorted to.

स्वाङ्गशीतलं बहिःशीतलं च ।  
 वंहिस्थमेव शीतं यत् तदुक्तं स्वाङ्गशीतलम् ।  
 अग्नेराकृष्य शीतं यत् तद् बहिः शीतमीरितम् ॥

*Swanga-shitala and Bahis-shitala.*

A heated substance is called swanga shitala, when it is cooled of itself without being removed from the oven.

A heated substance is called bahis-shitala, if it is cooled after removal from the fire place.

अथ रससिद्धाः ।

नन्दिराजस्तथा शुक्राचार्यश्च वसुधागुरुः ।  
 आदिमश्चन्द्रसेनश्च लङ्केशस्तस्य घातकः ॥  
 कपाली मत्तमाणडव्यौ भास्करः शूरसेनकः ।  
 रत्नकोशश्च शम्भुश्च सात्त्विको नरवाहनः ॥  
 इन्द्रदो गोमुखश्चैव कम्बलिव्याङ्गिरेव च ।  
 ब्रह्मज्योतिर्मुनिश्रेष्ठः दरडी च सोमदेवकः ॥  
 नागर्जुनः सुरानन्दो नागवोधिर्यशोधरः ।  
 खण्डः कापालिको ब्रह्मा गोविन्दो लम्बको हरिः ॥  
 मन्थानभैरवश्चैव नित्यनाथश्च वाग्भूटः ।  
 अनन्तदेवसूरिश्च भूदेवो भुवि विश्रुतः ॥  
 लुप्तप्रायरसज्ञानोद्धारकोऽमृतपाणिकः ।  
 रसजलनिधिर्येन रच्यते यं सुधानिधिः ।  
 सन्तरणाय सूरीणां वैद्यनाथप्रसादतः ॥  
 सप्तत्रिंशदिमे सर्वे रससिद्धाः प्रकीर्तिलाः ॥

*Names of well-known chemists.*

Of the innumerable chemists, most of whom have passed into oblivion, the names of the following are still remembered :—(1) king Nandi, (2) Shukra, the sage, (3) Adima, (4) Chandra-sena (5) Ravana (king of Lanka), (6) king Rama-Chandra of Ajodhya (7)

Kapali (8) Matta, (9) Mandavya, (10) Bhaskara, (11) Sura-sena, (12) Ratna-kosha, (13) Shambhu, (14) Satwika, (15) Nara-bahana, (16) Indrada, (17) Gomukha, (18) Kambali, (19) Vyari, (20) Brahma-jyoti, (21) Dandi, (22) Soma-deva, (23) Nagarjuna, (24) Surananda, (25) Nagabodhi, (26) Jasodhara, (27) Khanda, (28) Kapalika, (29) Brahma, (30) Govinda, (31) Lambaka, (32) Hari, (33) Manthana-Bhairava, (34) Nityanatha, (35) Bagbhata, (36) Ananta deva, and (37) Bhudeva (the author.)

त्वदुद्दत्तद्रव्यसंभारस्तदंग्रावपितो मया ।  
त्वदिच्छाचालितस्य मे ममत्वं क महेश्वरि ॥

इति सिद्धवैद्यश्रीभूदेवदेवशर्मविरचितरसजलनिधिनाम-  
महाग्रन्थस्य तृतीयखण्डं समाप्तम् ।

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